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Notes and Items.

THE urgent necessity of founding a convalescents' home in Chicago was never more clearly illustrated than in the recent deplorable death of a typhoid-fever patient immediately after discharge from the county hospital. The hospital authorities may be technically right in claiming that patients are entitled to leave when they choose, immediately after recovery, but it is obvious that patients are not always accurate judges of their own convalescence. There should be an institution in Chicago where convalescent patients without means or friends should be allowed to go after discharge from a hospital until their entire recovery is beyond question.

—*Chicago News.*

GONORRHŒAL CYSTITIS.

HOTEL ROSIER, Thirteenth and Olive Sts.,
ST. LOUIS, MO., May 2, 1891.

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Read the advertisement on page ix.

A QUACK ADVERTISEMENT.—A quack, having invented a wonderful hair invigorating fluid, applied to an editor for a testimonial. He gave it in these terms, calculated, we should think, to convince the most skeptical: "A little applied to the inkstand has given it a coat of bristles, making it a splendid penwiper at little cost. We applied some to a ten-penny nail, and the nail is now the handsomest lather brush you ever saw, with beautiful soft hair growing from the end of it, some two or three inches in length. Applied to the door-stones it does away with the use of the mat; applied to the floor, it will cause to grow therefrom hair sufficient for a Brussels carpet. A little weak lather sprinkled over a barn makes it impervious to wind, rain or cold. It is good to put inside of children's cradles, sprinkle on the roadside, or anywhere where luxuriant grass is wanted for use or ornament. It produces the effect in ten minutes."—*Tonsorial Times.*

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REED & CARNRICK, Manufacturing Chemists,

NEW YORK.

The Times and Register.

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Original Aricles.

TYPHOID FEVER.[1]

BY WILLIAM F. WAUGH, M.D.,
PHILADELPHIA, PA.

I OWE this society an apology for addressing it the third time on the subject of typhoid fever. But to us this is the most important of all the continued fevers; as it prevails in every part of the State. And now that so many able workers are placing their ideas before the profession, it is necessary for one who believes he has things of importance to say, to speak out emphatically and persistently, or his first utterances are quickly forgotten.

In 1888 I proposed to you the treatment of typhoid fever by the administration of the sulpho-carbolates. I now lay before you the results of that treatment in one hundred cases.

PATHOLOGICAL BASIS.

The researches of Klebs and Eberth have given us the means of comprehending this disease, and of assigning a definite explanation to each of its salient phenomena; and consequently have enabled us to apply our remedies with a distinct purpose in view.

We have to deal with a specific morbific principle, a living entity, a micro-organism, entering the body occasionally through the air-passages, but almost always passing into the alimentary canal with the food or drink. Here it multiplies, and during its life produces certain phenomena that are manifested to us as the symptoms of typhoid fever. It is almost certain that these are not all due to the typhoid bacillus; but that by its operations this organism opens the way to others, and to the work of the latter we owe no small part of the phenomena observed during an attack of typhoid. For instance, while the typhoid bacillus attacks Peyer's patches, and sets up a disease therein, it seems probable that the suppuration of these patches is the work of the ordinary bacteria of suppuration; the staphylococci, etc. These are always to be found in the intestinal canal, but their action is successfully resisted by the tissues until these have been weakened by the disease set up by the typhoid bacillus. So, also, the suppuration occurring in various parts of the body, as complications or sequels of typhoid, are probably due to this secondary infection by the pyogenic bacteria, entering the system through the door opened by the typhoid bacillus.

Moreover, we know that the effects of micro-organisms in the body are often mediate; they are not caused directly by the presence of these organisms, but are produced by those substances generated in the body by the bacteria, known as ptomaines, that act as agents more or less toxic to the human body, like the alkaloids. When these ptomaines shall have been sufficiently studied, we will be able to detect their presence in the body by their effects, as surely as we recognize the action of morphine or atropine by examining the pupil. At present, we can only treat of these substances in mass; and I will ask you to consider for a moment the state of the intestinal canal, during the course of a typhoid fever. The fever has dried up the secretion of the digestive fluids, lacteal absorption is prevented by the disease of Peyer's patches. The intestines contain a mixture of vitiated secretions, dead and dying tissues, food that cannot be digested; the whole forming a decomposing mass in which the typhoid bacillus, the pyogenic bacteria, and a host of unknown micro-organisms carry on their work, unchecked by the forces that in health are sufficient to prevent, or inhibit their functions. Here is found the field for the employment of antiseptics; the indication being to destroy the micro-

[1] Read before the Pennsylvania State Medical Society, June 3, 1891.

organisms, and thus prevent the production of those toxic bodies that, absorbed from the intestinal canal into the blood, give rise to a certain portion of the symptoms of typhoid fever. I say, a portion, not all, for it has been shown that even in the earliest stages of this disease the typhoid bacillus has penetrated beyond the intestinal canal, and has been found in the blood. This explains why in some cases the duration of the attack is not materially shortened; for the function of the antiseptic medication is essentially local. No remedy has yet been found that can pursue the microbe in the blood, and saturate this fluid to such a degree as to destroy the life of the bacteria in it, without first destroying the life of the patient.

RATIONAL THERAPEUTICS.

From this brief sketch of the pathology of typhoid fever, we are prepared to consider the question of therapeutics from a rational standpoint. There is no excuse now for empirical or symptomatic methods exclusively. Of these, the antipyretic treatment has had the greatest popularity; especially as regards the cold bath. This measure has been so generally employed that the cases so treated are numbered be many thousands. But we are really not agreed as to whether the fever thus suppressed is an enemy to by antagonized or a friend to be welcomed. Some have claimed that fever is Nature's means of destroying intrusive bacteria; the life of these organisms being strictly limited within certain degrees of heat. Taking it for granted, however, that fever is an evil, it is still a crude and unscientific method of treatment, to suppress this fever by applying cold, instead of going directly to the heart of the matter and removing the cause of the fever. Is it not better to clean out a dirty cellar than to seal up the openings that let the effluvia enter the house?

The only excuse for such a method of treatment is the want of a better one; and this I believe I have found in the use of intestinal antiseptics. By the production and continuance of intestinal antisepsis we put a stop to all the morbific operations going on in the bowels. The micro-organisms are destroyed; the production of ptomanies is stopped, and the symptoms of the disease are reduced to those arising from the bacilli that have penetrated beyond the reach of local germicidal agents. This enables us also to differentiate the effects due to this intestinal decomposition from all others.

INTESTINAL ANTISEPSIS.

Both before and since my paper appeared in 1888, there have been numerous applications of this principle. Calomel had been a favorite with practical physicians long before Wunderlich set upon it the seal of his approval. I do not know that George B. Wood ever explained the action of turpentine, but its effect is undoubtedly due largely to its antiseptic action; especially as it has been frequently noticed that the best effects are obtained from an old oil that has been oxidized largely. Iodine and carbolic acid were recommended by Bartholow; and iodine alone by Liebermeister. Salicylic acid, resorcin, naphthol, and naphtholine have each been advocated; and each is probably of value as an antiseptic. But none of these can compare with the sulpho-carbolates, because none is so effectual and so free from objectionable features. Salicylic acid is too feeble in antiseptic power, unless given in doses so large that they cause deafness and heart-failure. Carbolic acid is too nauseous, too irritant, and, if given in doses large enough to produce intestinal antisepsis, is liable to cause toxic symptoms, sometimes developing very suddenly. Iodine is open to the same objections. The naphthols have been used by Bruce, with good effect; but unfortunately the limit of toleration is reached before the production of antisepsis. Besides, the nauseous taste is very objectionable. Salol unites the disadvantages of its constituents, but in a less degree than either. It is, perhaps, better than any of the preceding agents, but is not nearly so powerful as the sulpho-carbolates.

In the sulpho-carbolate of zinc we have an agent that is singularly free from objectionable qualities. It is inodorous, almost tasteless, easily retained by a delicate stomach, and the most powerful antiseptic I have ever introduced into the alimentary canal. I have given 5 grains every two hours for weeks, without noting any ill-effects. Much less than this suffices to fully disinfect the intestinal canal; in fact, 2 grains every four hours will usually deprive the stools of all unpleasant odor. At first I gave the drug only in powder, with an equal quantity of bismuth; but latterly I have been using a keratin-coated pill. This keratin-coating was introduced by Unna, who claimed that this substance is insoluble in the gastric juice, and will thus carry the drug, undiluted, past the stomach into the intestines, where, meeting the alkaline secretions, the coating will be dissolved, and the drug exercise its full force where it is most needed. This, however, has been pretty surely disproved; and I find that acids dissolve the coating of these pills in a test-tube quite readily. The pills, however, are easily taken and fully as effectual as the remedy in powder. My rule is to give 2½ grains every two hours, until the stools lose their offensive odor, then to continue the same dose often enough to prevent the return of the odor. I regret that I have no more scientific means of regulating the dosage; but this answers all practical purposes.

EFFECTS OF THE SULPHO CARBOLATES.

Since 1888, I have used this drug in every case of typhoid fever treated by me. These cases, excluding those in which the diagnosis was not certain, and those in which the sulpho-carbolate was not employed until a late stage, number over one hundred. All of these recovered. All the doubtful cases recovered. The number and proportion of abortive cases treated by me in the same period, and not included in this list, were very large. The specific effects of the drug upon the symptoms were as follows: The fever fell from one to two degrees as soon as the stools became inodorous. This has been an invariable effect; and, as this fall brings the case out of the limits recommended by Brand as suitable for the cold bath treatment, this result alone would warrant us in the use of the sulpho-carbolate.

The diarrhœa ceased within twenty-four hours, or was reduced to a minimum. In fact, constipation generally ensue, and we were compelled to use enemas or salines to keep the bowels open, so as to secure antisepsis of their whole extent.

The tympanites and borborygmi disappeared, the abdomen becoming flat.

Intestinal hemorrhage occurred but once, and that in a case where the disease had nearly a week's start before the sulpho-carbolate was commenced.

The headache and delirium passed away with the fall in the fever, and did not reappear.

Now, all these effects followed with such unfailing regularity that I am compelled to believe that the symptoms mentioned are all due to the absorption of ptomaines from the intestinal canal.

In addition, I would say that the course of the disease has been nearly always shortened; that complications and sequels have been practically unknown.

If you will admit that one who has studied this fever with interest for twenty years has learned to recognize it somewhat earlier than he can demonstrate it by such unquestioned symptoms as the rash and the fever type, I will state that very many abortive cases have occurred; where, even after a threatening beginning, the sulpho-carbolate has dissipated the attack in a week, or less. How do we reconcile this belief with the statement that the typhoid bacilli have been discovered in the blood, beyond the reach of remedies, in the earliest stages? It must be remembered that there is also a constant breeding of these bacilli going on in the intestines during the progress of the disease; and it is a fair supposition that, if these are destroyed, the forces of the system will prove sufficient for the destruction of the few that first entered, probably by phagocytosis.

LIMITATIONS.

As to the limitations of this remedy: I have not employed it for three years without learning that, like a certain brand of soap, there are some things it will not do.

In cases where I have been called late into the case, or where the antisepsis has not been perfect, no miracles are wrought by the zinc. If the intestinal ulcers are extensive, if hemorrhages have occurred, or when Wood's signs of impending perforation are present, turpentine is a better remedy, although I usually give the zinc also. Ataxy and cardiac failure demand their own remedies; the zinc is valueless to cure these conditions, inestimable as a preventive. Such cases should not be counted as failures of the method, then, as its function is not that of a panacea against the whole Pandora's box of ailments that accompany a typhoid. Its function is sharply defined and limited; but when used with a clear idea of its function, it renders these dangerous accidents impossible.

ABORTIVE TYPES.

In order to illustrate my remarks upon abortive cases, I select one from my note-book:

A young girl had passed through a severe attack of unmistakable typhoid fever. Her mother, who had never had this fever, nursed her through it. The hygiene of the house and of the room were poorly attended to. Some time after, the mother was seized with headache, aching of the bones, insomnia, broken and disconnected dreams, slight cough, irritability of the bowels, tympanites, borborygmi, colicky pains, gurgling and tenderness in the right iliac fossa, tongue showing a tendency to dryness down the center, and slight epistaxis. Here was enough to justify a diagnosis of incipient typhoid fever; but, under the sulpho-carbolate, the patient recovered in three days.

A more pronounced case was that of a medical student, whose temperature had mounted up in the regular way until it had reached 103.6° the third evening, and 102.5° the next morning, when the zinc was commenced. That evening it was 102.5°; the next, 102.8°; the next, 102°; the next, 100.8°; and thereafter it did not rise above 101° at any time during the remainder of the attack. This lasted, in all, twenty-three days, when the temperature reached the normal point. In this case the spots were plainly visible.

I have scarcely anything to add to my remarks in 1888 upon the diet of these cases. My reliance is still upon the raw white of egg in ice-water, beef peptonoids, or raw beef with bovinine, and absolutely nothing else. Milk I scarcely use in typhoid fever, except in the form of junket, or peptonized milk. Alcohol does not enter into the treatment of one-third of my cases; not that I have any prejudice against it, but simply because I do not need it.

The stools are carefully disinfected before being thrown into the sewer.

Numbers of other physicians have adopted this treatment, and their experience has confirmed me in the belief that we have, in the sulpho-carbolates, agents of unusual value in the treatment of typhoid fever.

NITROGEN-CONTAINING FOODS AND THEIR RELATIONS TO MORBID STATES.[1]

By FRANK WOODBURY, M.D.,
PHILADELPHIA, PA.

IN connection with the paper of the evening, by Professor Chittenden, upon the "Food-value of Beef-preparations," I have been invited by the Honorable Board of Directors to contribute a few remarks upon "Nitrogen-containing Foods and their Relations to Certain Morbid States." Under the circumstances, it is proper that what I have to say shall be made as brief as possible.

At the outset, our attention is drawn to some fundamental physiological facts which must be kept in mind during the discussion of this subject. The human body is now regarded as a unit composed of an aggregation or community of cells. These anatomical elements differ from each other in some respects, but agree in this: each cell consists of two parts, one living and one non-living, corresponding with cell-nucleus and formed material. What is visible to us is the non-living part, or the formed material; the real living part of the organism is hidden from view. Just as in vegetable tissue, the parts that are permanent and solid are composed of the cell-walls, which may remain long after the essential living part or protoplasm of the wood-cell has dried up and disappeared—in a similar manner, in the human subject, the various organs and tissues which give it form and substance are not living; the only part exhibiting vital phenomena is the soft, shapeless, and colorless cell-nucleus, consisting of protoplasm or bioplasm. This living substance, in its chemical composition, resembles the various tissues, varying somewhat according to function, but it contains one essential ingredient which is so characteristic as to confer its name upon the whole class—this element is nitrogen. The celebrated dictum, "Without phosphorus, no thought," might be paraphrased "Without nitrogen, no life." Viewed from the physiological standpoint, the name "Azote," applied to this element by Lavoisier, appears remarkably inappropriate.

As a necessary constituent of the tissues, therefore, nitrogen, in a state of combination, is always present in the human body. Since it is found in considerable quantity and in various forms in the excretions, some two or three hundred grains being discharged daily by the kidneys alone, besides what is lost by the intestinal tract and the skin, it is evident that in order to maintain life the supply must be kept up from out-

[1] Read before the Philadelphia County Medical Society, May 29, 1891.

side sources. There are two principal directions in which we may look for the supply of nitrogen, (1) the atmospheric air, and (2) the food.

Although the atmospheric air contains about eighty per cent. of nitrogen, we may dismiss this at once as not available, beyond a very limited extent. Experiment has shown that it is not consumed or absorbed in the act of respiration; but a certain amount of air is always swallowed with the food and passes into the stomach, where it may become absorbed by the gastro-intestinal mucous membrane. It is possible that a small quantity is introduced by this channel, especially since it has been demonstrated that a moderate amount of gaseous nitrogen is excreted or exhaled by the skin.

Nitrogen-containing food must, therefore, be regarded as practically the only source of the constant supply of nitrogen which is so essential to the maintenance of the body in a normal condition. In fact, due attention has already been given to this by Liebig, Fick, Wislicenus, Parkes, Pavy, Flint, and others; and the proper relation of the two great divisions of proximate principles of organic origin, the nitrogenized and the non-nitrogenized, have been pretty closely determined. As their results are to be found in all the text-books, I will not refer to them in detail. I may remark, however, in passing, that from the clinical standpoint there appears to be a fallacy underlying all these calculations of dietaries, where food values are expressed in grains of nitrogen and carbon, inasmuch as no allowance is made for waste; the entire quantity ingested is supposed to be digested and assimilated. In practice we know that the feces contain considerable nitrogen, which is not excretory, properly speaking, but represents the excess of consumption, part of the food having escaped digestion. In nursing infants the feces consist largely of undigested casein. Even adults are not able to entirely digest milk, and if so simple an article of food as milk is not completely assimilated, what warrant have we for assuming that the nitrogenized constituents of peas and beans, or of animal tissue, will yield their full equivalent of potential force to the organism? On the contrary, we know it to be a fact, that much food-stuff passes through the alimentary canal without having its proximate principles extracted by the digestive organs and the absorbents.

We may, however, both clinically and by physiological experiment, making due allowance for the personal equation, determine with sufficient exactness the kinds and proportion of different foods required to maintain the body in a normal condition. Proceeding on the same lines, we may discover the effects of an excess, actual or relative, of nitrogen; or, on the other hand, we may ascertain the results of deprivation either partial or complete. We may also be able to see some therapeutic applications of the knowledge thus gained.

From the time of Hippocrates, and even earlier, it has been known that health and disease are largely influenced by food, and that the effects of an animal diet are different from those of a diet exclusively of vegetables. A distinction was even made between leguminous and other forms of vegetable food. It was not until our own day, however, that the practising physician possessed sufficient knowledge of the chemistry of food and of metabolism in health and disease to enable him to direct the diet of his patients upon scientific principles. Following the definition given by Hippocrates, "Medicine consists in addition and subtraction, the addition of the things which are deficient and the subtraction of those things which are redundant; he who practises this is the best physician, but he whose practice is farthest from it is the farthest removed from a knowledge of the art"—we can now prescribe viands suited to a deficiency of nitrogen in the system, or substitute others if there is an excess. To the therapeutic aspect of the subject I will now very briefly ask your attention.

Taking up the latter instance first, we find that a diet poor in nitrogen is useful in the several forms of rheumatism, in gout and lithæmia, and also in recurring attacks of biliousness and bilious headache. Scurvy appears to be caused by an absolute, as well as a relative, excess of nitrogen in the food, and I have seen it caused by the use of an excessive amount of fresh meat among children in an orphan asylum. In its treatment, vegetable food relatively poor in nitrogen is usually employed. Some skin diseases, possibly of lithæmic character, are only to be cured by withholding nitrogenized food. It seems possible that a liberal use of meat in the diet may have some connection with the development of cancer, a disease which appears to be on the increase, as was pointed out by Dr. R. A. Cleemann, of this Society, in his "Address on Hygiene," delivered before the Medical Society of the State of Pennsylvania a few years ago. Dr. W. Mattieu Williams, in a little work on the "Chemistry of Cookery," pointedly directs attention to the large consumption of meat as a cause of various forms of cancer. In families where a hereditary tendency of this kind exists, it is possible that it might be overcome by vegetarianism. Some nervous affections, notably epilepsy and chorea, are greatly benefited by abstention from meat in the food.

Owing to the writings of Roberts, Fothergill, and others, a causative connection between a diet rich in nitrogen and some forms of kidney inflammation or degeneration is now generally recognized. And in the treatment of the various forms of Bright's disease, attention to the diet is generally admitted to be of prime importance. There is a widely spread opinion that nitrogenized food is favorable to the occurrence of inflammation, and for this there seems to be a scientific foundation. Parkes has shown that a non-nitrogenized diet causes lowered blood-pressure and diminished arterial tension. Meat, therefore, is ordinarily prohibited under the antiphlogistic treatment, as it was formerly called. In acute inflammations of mucous surfaces, especially in plethoric subjects, the use of animal food is usually forbidden. This should not be applied too strictly, however, for in some cases of subacute or chronic character, a generous and nourishing diet is necessary.

On the other hand, nitrogenized food may be prescribed where there is, from any cause, a deficiency of albuminous principles in the blood, for example, in anæmia or chlorosis. In phthisis, this condition is sometimes quite marked, and good results have been obtained from the "beef and hot-water" plan of treatment, and also from the use of fresh bullock's blood, or hæmoglobin, which requires less digestive capacity and is more easily assimilated than muscle-tissue.

Children frequently suffer from a deficiency of nitrogen. Where an infant is reared upon condensed milk entirely, the limbs are plump but the tissues are flabby, on account of anæmia. Such children are late in getting their teeth and have little power of resistance against disease. The addition of oat-meal, barley, or rice to the milk will often bring about marked improvement and may prevent the development of rickets. Just here I might stop to point out

the fallacious character of some of the arguments based upon the comparative chemical composition of woman's milk and other foods. Leeds found in a number of specimens of woman's milk that the nitrogenous constituents varied from 4.86 to 0.85 per cent. So that one specimen of mother's milk may have six times the amount of albuminous material contained in another.[1] This shows the necessity when the child does not thrive at the breast, of examining the milk to find out if it be deficient in nitrogenized constituents. If so, the addition of beef-meal, bovinine or other nitrogen-containing food in an easily assimilable form is advisable.

Eczema in infants, or in sewing women, is often traceable to a deficiency of nitrogen in the food, and Dr. Rohé, of Baltimore, advises the addition of meat-broth and eggs to the diet as an essential part of the treatment. Similarly, in many syphilitic eruptions upon the skin, in broken-down subjects, good food is a necessary preliminary to any specific treatment. Neurasthenia and atonic dyspepsia, which are so often associated in the same patient, especially if he is at the same time anæmic, can only be relieved by nitrogenized and fatty food, administered in a form easy of assimilation and at comparatively short intervals. On the other hand, in diabetes and in obesity, the diet may be largely nitrogenous, but in this case it is because there is a desire to reduce the carbohydrates and not because an excess of nitrogen is particularly sought after.

To return to the children, I wish to call attention to the fact that during the period of growth and development more nitrogen is needed than after the body has assumed its full stature. Hence, school children should have a due allowance of meat, and should be encouraged to eat oat-meal, corn, beans, peas, and other vegetables known to contain this valuable constituent.

In the foregoing brief *résumé* of an important and interesting subject, I have not made any distinction between the nitrogenous, proximate principles of animal and vegetable origin. Chemically and physiologically they are nearly identical; but practically there are minor differences of palatability, digestibility, and relative utility, which, at present, our limits will not permit us to consider.

MALARIAL HEMOGLOBINURIA.[2]

By H. McHATTON, M.D.,
MACON, GEORGIA.

Member of National Medical Association, Georgia Medical Association Macon Medical Society, Honorary Member of Kings County (N. Y.) Medical Society.

MY attention was first called to this disease in the summer of 1884 by having a specimen of urine referred to me for analysis. The conclusions drawn from the specimen were: that the condition was that of hemoglobinuria, and not hematuria, the destruction of the corpuscles taking place in the circulation at large, that quinine should be our sheet-anchor in treatment, and that cathartics were contra-indicated on account of their depressing effect.

Finding that all writers (as far as I could learn by reading) were of the opinion that it was a hematuria, and that there was great diversity in regard to treatment, I determined to study the subject to the best of my ability. To this end I published a circular letter in *The Atlanta Medical aad Surgical Journal*, requesting the practitioners of the State to forward specimens of urine to my address, giving their opinions in regard to treatment, mortality, etc.

I received many specimens (more from Dr. Hillsman, of Albany, Georgia, than from any one else), but virtually no expression of opinion.

Living far from any medical center, my literature has been confined to that of my own library; consequently there may be many valuable contributions to this subject that have escaped my notice.

There has been much discussion in regard to the first appearance of this disease. Feraud cites cases on the African coast as far back as 1820, and shows that it appeared in the new French posts a year or so after their settlement. I have heard of cases in Georgia in 1825 or 1830; the probabilities are that it is as ancient as any of the malarial group.

No race can claim exemption if put under favorable conditions for its development; the supposed immunity of the negro is not real; that they suffer less is unquestionable; they are not, as a class, a migratory race, and consequently less subject to variations of climate.

I have examined a specimen of urine from a case occurring in a mulatto, besides seeing several recorded, as well as one case of a full-blooded negro.

The etiology of this condition is unquestionably malarial; it only occurs in those that have been for some time exposed to malarial atmosphere, and have given evidences of malarial toxæmia; it responds as well to quinine as the average pernicious malarial attack; it is totally different from yellow fever, the only disease with which it is often confounded.

Pathological anatomy, according to Feraud, is as follows:

The skin is uniformly yellow and not in patches, as is the case in yellow fever. The earlier in the attack that the patient dies, the more intense the jaundice; ecchymoses is not as common as in yellow fever and effusions of blood as the muscles are not met with. There is no escape of blood from the muco-cutaneous openings, nothing characteristic in the cranial or thoracic cavities; the stomach is full of a greenish-colored liquid resembling spinach water. If there are inflammations of this organ, he considers that they are due to other causes, alcoholic principally.

The intestines present no peculiarity; the liver is the seat of decided changes estimating the healthy liver at 179.6 grms. (6¼ oz.); the weight is increased from 200 grms. to 1,000 grms. (from 7 to 35¼ oz.). this increase being due principally to congestion. The liver feels hard to the touch, the gall-bladder is distended with very dark viscid bile, the spleen weighs from two to three times the normal, is soft early in the disease, and hard later. The kidneys are congested and their weight increased; for the lack of instruments, the minute anatomy of these as well as the other organs has not been studied.

Many spots of ecchymoses are found in them, principally in corticle substance. The veins are in a state of extreme repletion; in fact, the state of congestion is often excessive, the pancreas, superrenal, capsules, uretes and bladder present no special lesions. There has been no competent chemical and histological examination of the blood; it gives gross evidences of a large amount of bile.

The patients with this disease have always given previous evidence of malarial toxæmia, and the longer that they stay in a malarial climate, the more apt they are to contract it. One attack predisposes to another.

[1] Quoted by Starr in his "Hygiene of the Nursery," Philadelphia, 1888.

[2] Read before the Georgia State Medical Association.

In the study of one hundred and eighty-five cases, Feraud found that ten occurred in the first year of exposure, forty-two in the second, seventy-nine in the third, thirty-seven in the fourth, nine in the fifth and eight after the fifth.

The majority of patients under his care were soldiers and criminals who were sent to Africa on an average of three years' time; consequently after the third year the residents became numerically less.

Feraud divides malarial hemoglobinuria into four types, which only differ in intensity, first mild, second severe, third grave, fourth siderant or pernicious. The mild form is usually intermittent; still any of the four may be intermittent, remittent or continued.

The initial chill is usually more violent than the previous ones that the patient has had, and is generally accompanied by nausea, vomiting, headache and hemoglobinuria. The jaundice comes on rapidly and is more intense than I have ever seen it in any other disease.

There is usually pain over the region of the kidneys and liver, which is increased by pressure.

The urine is increased in quantity early in the attack, but complete suppression sometimes takes place toward the end of the disease in fatal cases. Vomiting is one of the most distressing symptoms.

The vomited matters vary in color. At first they are the food, followed by emesis of biliary matter, and often the pure black vomit.

I have succeeded in producing hemin crystals from the vomited matters, so that there is no question in my mind that they often contain the blood constiutents.

The bowels are sometimes loose and sometimes normal in frequency. The passages often resemble in color the urine. Unfortunately I have been thus far unable to make a chemical and microscopical examination, but the appearance often gives gross indications of the blood constitutents.

Singultus in grave cases is a most distressing and persistent symptom. I have never seen hemorrhages from any of the muco-cutaneous openings.

The diagnosis of this disease is not difficult. In a person having been exposed to malarial influences for some time, a chill followed by more or less intense fever, green or black vomit, and hemoglobinuria, are sufficient to establish an absolute diagnosis. The examination of the urine is most important.

I have had the opportunity of examining a great many specimens of urine in the past year, and can give the following as the general characteristics. In color it varies from a brownish-red to a brownish-black. The order is usual that of normal urine, specific gravity from 1,012 to 1,034, dropping below the normal in convalescence, say 1,006 to 1,008.

Re-action in all the fresh specimens has been acid, sometimes very faintly so. It is always albuminous and will often boil solid. The sediment is usually quite abundant and a shade or so lighter in color than the urine. It is composed principally of granular matter, resulting from the decomposition of the blood corpuscles.

This often occurs in the shape of casts when they are very abundant. I look upon it as of serious import, as the two cases that have come under my observation have resulted in suppression. The casts were so abundant in these cases that it seems to me that the suppression might have been mechanical.

Other casts are often present, but in my experience never abundant. They are usually hyaline or hyalogranular, sometimes with a few blood or pus corpuscles attached. Uric acid and oxylate of lime crystals, with kidney, bladder (and in the female), vaginal epithelium often occur.

In fact all the train of unimportant urinary constituents are liable to be found. I have never found blood corpuscles in any number, and in many perfectly fresh specimens (twenty to twenty-five minutes old) have failed to find a single one, but have always succeeded in producing hemin crystals in abundance. Blood corpuscles have been observed by competent men, so that there is no question of their occurrence in considerable numbers in some cases. Still I look on this as purely accidental and probably dependent on the rupture of capillaries in the congested kidneys.

The coloring matters of the blood can only be demonstrated by boiling the specimen with sodic-hydrate and by the guiacunia and turpentine test.

Specimens of the black vomit in these cases give abundant hemin crystals.

The following is a translation of Feraud's valuable table on the differential diagnosis between this disease and yellow fever. The only remark that I have to make in regard to it is, that it is twelve years old and considerable advance has been made in the study of the two diseases during that time:

MALARIAL HEMOGLOBINURIA.	YELLOW FEVER.
A protracted stay in warm malarial countries is the predisposing cause, the most powerful and even indispensable.	A protracted stay in warm countries, malarial or not, decreases the probability of attack.
The sickness is always preceded by numerous paroxysms of malarial fever, simple at first, and then more or less complicated, and generally assuming more and more the bilious aspect.	The disease starts generally in the midst of perfect health and may show itself in subjects who have never had any attacks of intermittent fever, and who show signs of perfect health.
In every case the patient is notably ænemic.	
Generally the disease commences with a paroxysm of fever with violent shivering of longer or shorter duration, in every respect similar to a paroxysm of malarial fever.	The disease starts frequently with a cephalalgia which keeps increasing; the beginning of the fever cannot be determined as well as the commencement of the malarial paroxysm which is instantaneous.
The icterus appears at once with the first paroxysm of the disease, never goes off and gives from the outset and during the whole time a yellowish cast to the patient, varying from a yellow green to a deep yellow ochre; it is in every case general and of the same shade throughout.	The icterus appears toward the third day and takes the place of the red color of the integument which was present at the outset of the disease; sometimes it does not show itself if the attack is light and the recovery rapid; it is sometimes confined to certain regions, or exhibits noticeable degrees of intensity in different places on the same subject.
The course is intermittent or remittent at first; the pulse, urine and vomiting follow exactly these variations; when the fever cases then follows the period of weakness and recuperation; this is not similar to the remission in yellow fever, and is not separated in a perfect and absolutely distinct manner from the first paroxysm. It seems, indeed, that the fever is unwilling to give up its intensity, often endeavoring to return in its full strength if the patient succumbs to the fever period.	The course is continuous with inflammatory tendencies for two, three or four days; a change then takes place; it is distinct enough to have been called the convalescence of death; indeed, for from six to twenty-four hours it may be believed that the disease is ended and that the patient has become convalescent.
If the patient reaches the adynamic period he dies rather from profused exhaustion than from the effects of decomposition.	The second period is perfectly separated from the first by this transition. It is, so to speak, a period of disintegration of the subject, killing the patient by decomposition, suppuration, hemorrhage, etc.
The pulse follows the habitual variations of malarial fever during the feverish period of two or three paroxysms, which constitute the first part of the sickness; it does	The pulse at the outset is full and regular, as in continued fever, and it remains so until the transition called the convalescence of death; at this time it drops all at

not drop at once and absolutely, being in this and all other respects similar to the pulse of the intermittent paroxysms; even when everything is going on well, there can be noticed daily variations, which are indications of abortive paroxysms.

A total cephalalgia forming a heavy cap on the cranium of the patient goes on increasing during the six or eight hours of the paroxysms, then decreases noticeably, and sometimes disappears to return at the next paroxysm.

The face is haggard and yellowish from the start, or soon after the invasion of the disease; the conjunctiva are yellowish in color, never injected, and shining, as in the case of incipient conjunctivitis.

The pains in the trunk extend around the body from the small of the back to the hypochondriacal regions; the hepatic and epigastric regions are, at times, exceedingly painful, and touching them induces shooting pains that may provoke cries from the patient, yet they are often hardly noticed, and at times these pains resemble rheumatic pains in the limbs, being neither very persistent nor very acute; it is rather a condition of uneasiness and weariness than of well defined pain.

The vomited matters are bilious, of a very pronounced green color, often similar to spinach water. The vomiting occurs constantly from the start of the paroxysm, and stops with it to return with the next.

After the first period, or fever period, vomitings continue, but preserve exactly the same characteristics. They stain linen light green, and, if gathered in a basin, they appear transparent, and of an emerald green or olive color.

There is, at times, a bilious diarrhœa from the start of the disease and during the vomitings; later there is often a lessening of the stools, and frequent recourse must be had to aperients to keep the bowels open.

The paroxysms at the onset may be allayed by quinine, and never call for antiphlogistics.

The disease is manifestly connected with malaria; it follows and is followed by paroxysms of intermittent fever; it is absolutely not transmissible from man to man.

Relapses in this disease are very frequent, and more and more easily contracted as the attacks are multiplied.

The tongue is damp and large, covered first with a whitish coating tolerably thick; this coating is soon covered greenish by the vomit; the tongue is not red at the point nor at its edges; it remains large, coated, and damp to the end of the sickness.

once, and remains compressible and infrequent.

A super orbital cephalalgia is at first very intense, but it either rapidly gives way under treatment, or continues without intermittence to the end of the inflammatory period during one or two days.

The face is flushed, of a light mahogany color at the start; it is only after several days that it becomes yellowish at the nostrils, the eyelids, and the lips; the eyes are shiny, the conjunctiva injected, and sometimes slightly bleared, as in incipient conjunctivitis.

The pains in the lumbar regions, which have been called coup de barre, and characterized by their intensity; they are very violent, and do not extend around the body; the hepatic and epigastric regions are not painful to the touch; generally acute pains are felt in the limbs, especially in the calves.

Vomiting at the start is not frequent, and is in no case bilious. The spells of vomiting do not exhibit that intermittence noticed in the bilious hemorrhagic fever.

After the inflammatory period the vomitings, when they appear, are first watery and colorless, then gray, then brown, containing a matter like soot, staining linen blackish-brown, and not light green, absolutely opaque when received in a basin.

Constipation is common at first, diarrhœa only when the sickness is protracted and is not bilious; on the contrary, it is exceedingly fœtid, indicating a profound decomposition, and often containing that black matter absolutely unknown in bilious hemorrhagic fever.

The fever continues from the start; cannot be controlled by quinine, and often requires antiphlogistic treatment.

The influence of malaria has not been incontestibly proved; the disease is not necessarily, nor even normally, preceded or followed by paroxysms of intermittent fever; the transmission from man to man is sadly and terribly frequent.

A second attack of this disease in the same patient is so rare that its occurrence has been denied by many authorities.

The tongue is white at its center, where it is fuzzy; it is red on the tip and on the edges; it is small and rounded; later it is bleeding or tough and trembling, as in typhoid affections.

The urine is black from the onset, and characteristic in its color to such an extent that the patient is always impressed by it; it is abundant and frequent, of a brownish-black aspect only during the paroxysms; later the urine is again strongly colored, but is no longer black; it may contain at this stage a little bile; it never does at the start; it is scanty at times, but never suppressed, excepting a few hours preceding death.

Probably parotiditis have been observed rarely and accidentally, where prolonged doses of calomel, causing a stomatitis, had been employed. I have knowledge of only one or two cases of this kind in over three hundred observations, and the relation existing between cause and effect has been easily established.

The urine at the start is red, clear, and simply feverish; it is limpid and scanty; later, if the disease grows worse, the urine is thick and turbid; it becomes more and more scant; finally a complete anuria often takes place one or two days before death.

Parotiditis is very frequent at the end of the disease.

Following Feraud, we have in 268 cases 124 mild cases, with no death; 64 severe cases, with 13 deaths; 59 grave cases, with 32 deaths, and 21 pernicious or siderant cases, with 21 deaths.

Unfavorable symptoms are a very violent chill, nervous symptoms of all kinds, and irregular or delayed appearance of the jaundice; the continued dark color of the urine, with diminution in quantity; the occurrence of large numbers of casts composed of the detritus of the blood corpuscles.

Persistent vomiting, black vomit, intense lumbar pains and continued hiccough; Feraud looks upon the latter as an especially unfavorable symptom.

Treatment.—I have been somewhat criticised in regard to the size of my doses of quinine in this disease; my limited experience and the literature of the subject have convinced me that quinine is the only remedy that has any controlling effect, and that it should be given in large doses. It is as near a specific as we possess in medicine in its controlling influence in all the malarial group; all other medicines can only serve us in controlling symptoms, and are consequently secondary.

To show the effect of the quinine treatment in contrast to that of calomel, I introduce the following table of Feraud:

	Cases.	*Deaths.*	*Per Cent.*	
a	71	22	31	Quinine in very small doses, calomel purgative.
d	11	4	36	Quinine in very small doses, calomel and other purgatives as the base of treatment.
e	42	13	31	
f	30	9	30	
b	40	8	20	Quinine in medium doses, calomel in small doses.
c	29	5	17	
g	27	3	17	
h	18	2	11	Quinine in large doses.
i	18	0	0	

In the group of eighteen cases under "H," one of the deaths was due to a pernicious or siderant and the other to an inter-current pernicious attack.

Dr. Norcum reports eleven cases with one death, which occurred one hour after he had seen the case, his treatment being large doses of quinine and hypodermics of morphine.

Feraud's treatment consists in giving an evacuant (including in this term an emetic or a laxative) in the early stage of the disease, if the patient's strength is good, but he often relies entirely upon quinine.

In regard to calomel he says: "I should like to see it disappear from the pharmacopœia of hot countries." He not only looks upon it as useless, but even harmful, and after a long and close study of the subject finds that a course of mercurials is a decided predisposing cause of the disease in question.

I should advise, as soon as the case is diagnosed, a sufficient dose of quinine to cinchonize the patient, say 30 grains in solution or its equivalent hypodermically, and this state of cinchonism should be kept up by smaller doses as long as the disease lasts. In this disease the stomach is so irritable that it cannot be depended upon, and we are compelled, at least in severe cases, to depend entirely on rectal and hypodermic administration of both food and medicine.

In regard to the symptomatic treatment, I look upon morphine as second to quinine; the hiccough and vomiting, both most distressing symptoms, can be better controlled by morphine than by anything else. I have given all the ordinary remedies a most thorough trial in this vomiting, and must confess that in severe cases I cannot recommend any of them.

Inhalations of nitrite of amyl will control the hiccough at any time, but its effects are so transient that in the long-run I fear it does us no good; for the abdominal pains hot poultices rank next to morphine. I cannot advise blisters, as thus far I have seen no good result from the use of them. Theoretically, I cannot see how they can be of any benefit; practically, they increase the suffering of the patient to a great extent.

Stimulation by alcoholics or digitalis must be free in proportion to the severity of the case.

Alimentation is imperative, and in the severer case will have to be almost exclusively rectal.

In convalescence we have a condition of profound ænemia, and I find the following combination very successful in its effect:

R.—Stych. sulph..... gr. i.
Acid arseniosi,
Hydrarg. bichlo.....āā gr. ½
Quinia sulph.,
Ferri lactas.....āā 3i.
M.—Ft. pill, No. 60.
S. One after each meal.

A change of climate must be insisted upon.

CONCLUSIONS.

1. That this disease is purely malarial.

2. That the jaundice is not dependent on impairment of the hepatic functions, but on the coloring matters of the blood following the disintegration of the red blood corpuscles.

3. That quinine is the only medicine which has any controlling influence on the course of the disease.

Since the conclusion of this paper, I have received the fourth volume of Pepper's System of Medicine, in which there is an article on malarial hemaglobinuria by Dr. James Tyson; his experience is confined to mild cases entirely; his conception of this disease coincides so much with mine that had his article been in the first instead of the fourth volume of Pepper's System, I should have selected some other subject for my paper before this body.

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Reviews in the *American Journal of Sciences*, Vol. XIX., pages 163 to 176.

Treatment of hemorrhagic malarial fever (monograph), by Thomas J. Turpin, M. D., Forkland, Alabama, 1881.

Hemorrhagic malarial fever as it occurs in Alabama, by Jerome Corchran, M. D., *Journal of the American Medical Association*, Vol. IV., No. 22.

[NOTE.—Last winter I addressed some questions to Dr. A. W. Reyes, editor of *El Eco Cientifico de las Villas*, and one of our best known Spanish American Scientists; the answers occur in *El Eco* of February, 1886, which came to hand too late to incorporate in this paper.

The first question was in regard to etiology, which has been pretty thoroughly settled. The second is as follows: Does the profession in Cuba use quinine in malarial hematuria? Do they use calomel? Answer. Amplifying Dr. McHatton's question, we will say that what has been published in regard to paludism, hematuria and quinine is found in "Corre Fiebres bilieuses et Typhiques des pays chauds," Paris, 1883.

Dutroulan and Collin speak of bilious hemorrhagic fever in their respective papers. Benoit's important monograph was published in the fourth volume of the *Archives de Medecine Navale*, in 1881; in said Archives there is a work by Corre on the same subject, and in the *Gazette* of the hospitals of Paris of 1872, there is an observation by Primet, on a case of pernicious hematuria treated with happy result by large doses of quinine.

In regard to calomel, here it has been much used (we give it in our first observation on las fiebres de borras); in other times the treatment of paludal fevers *until the quinine treatment came to throw to the ground all others.*]

Society Notes.

NEW YORK ACADEMY OF MEDICINE.

SECTION OF ORTHOPÆDIC SURGERY.

SAMUEL KETCH, M.D., Chairman.

DR. T. HALSTED MYERS presented a case of

MARKED RICKETS,

called congenital, on the mother's positive assertion that the greatly enlarged epiphyses of the tibiæ, femora, and radii were presented when she first examined the child a few days after birth. The sternum at that time, she noted, also was abnormally prominent. She had been in very good health all through gestation, and the father was a healthy man. No specific history could be obtained.

At present, the child is six years of age, and presents all the deformities of rickets in a marked degree, except that the head is well shaped, and there is a marked increase of the normal dorsal curve of the spine, rather than the dorso-lumbar kyphosis usually found in these cases. An unusual degree of permanent knee and hip flexion also exists, and the patient assumes, when resting, the hand-to-knee position of Pott's disease. The epiphyseal tenderness present seemed to indicate an active stage of the disease. After being nursed nine months, the child had a mixed diet, not especially starchy, nor lacking in animal fats.

The Chairman thought it not improbable that the spinal symptoms were the result of an acute lesion occurring coincidently with this diathesis. In cases of simple kyphosis which he had examined, one of the points in the differential diagnosis had been the absence of psoas contraction, and in most of these cases the curve, unlike this one, disappeared when the patient was in the prone position.

DR. JOHN RIDLON exhibited the photograph of a patient, nineteen years old, who had had exactly this position all his life. There were additional curves in both the tibiæ and femora, which had developed gradually during his growth. It was worthy of note that psoas contraction was also present in this case.

DR. NEWTON M. SHAFFER had seen psoas contraction in these cases of rachitis. The case just

presented was not, in his opinion, one of tubercular disease of the spine, but a sensitive condition of the cancellous structure in the bodies of the vertebræ which simulates Pott's disease. He had never seen a case which he could consider one of congenital rachitis, and he was inclined to look upon this one as an instance of rachitis acquired at a very early age. It was not uncommon to find in rachitic patients a condition of the muscles somewhat resembling that found in tubercular joints. He was reminded of a case which he had seen in St. Luke's Hospital, in which there was a very sensitive joint, associated with muscular symptoms which might suggest hip joint disease, but these were simply due to hyperæmia of the epiphysis occurring in a rachitic subject, and in due time, with proper attention to nutrition, these symptoms disappeared.

Dr. RIDLON said that he had expected to present a patient illustrating certain peculiar conditions found in persons who had the

CAISSON DISEASE.

His patient had been working in compressed air for sixteen years, and during the past year had had forty or more attacks of the cramps which are peculiar to this disease. Associated with these, were stiffness, gradual shortening, and outward rotation of the right lower extremity, with a direct upward dislocation of the hip for a distance of three-quarters of an inch. This man had informed him that he knew of a number of others who had been working in compressed air, who had paralysis with shortening of the limb.

The Chairman said that he had seen a man, forty years of age, who had been a caisson worker and diver, and who presented an affection of both hips. There was very little motion except in abduction. There was no history of rheumatism, or other constitutional disorder.

DR. SHAFFER had recently seen at the Orthopædic Dispensary a caisson worker, who presented bilateral hip symptoms, and who was scarcely able to walk. In this case, the symptoms were those of a pronounced rheumatic type, and the changes were apparently due to rheumatic arthritis.

DR. RIDLON also exhibited photographs of the latest modification of Grattan's osteoclast, and of some of the cases which this surgeon had treated by means of the instrument. He now used it for forcibly correcting club feet, and in the opinion of the speaker, it was the handiest and most efficient contrivance of its class that he had seen.

NON-UNION AFTER OSTEOTOMY IN A CASE OF SEVERE RACHITIS.

The Chairman presented a little girl with a very exaggerated form of rickets, whose symptoms indicated that the disease was still active. The chief point of interest was the fact that about three years before, a skilful surgeon had performed osteotomy upon her for the correction of a very severe form of bowlegs, and this had resulted in non-union. This case showed the folly of operating in the presence of such a virulent form of rachitis. The treatment in his hands had consisted in the application of coaptation splints, and of a perineal crutch, which by means of a snap-joint allowed motion at the knee, but prevented dangerous traumatism, and favored locomotion. The idea of the apparatus was to favor locomotion rather than to attempt to secure union.

DR. ROYAL WHITMAN doubted if this treatment would lead to union of the fragments, for the end of the bones in such cases become extremely hard, and usually require to be removed before union can be secured.

DR. R. H. SAYRE thought the non-union in this case might have resulted from the fact that the deformity was so great, that in order to correct it, a considerable interval must have been left between the ends of the bone after the osteotomy.

"WHEN SHALL WE DISCONTINUE MECHANICAL TREATMENT IN HIP JOINT DISEASE?—WITH REMARKS ON THE SYMPTOMS AND TREATMENT."

The paper of the evening, bearing the above title, was read by DR. NEWTON M. SHAFFER.

The writer called attention to the difficulty which often existed in deciding this question, and entered a strong protest against the use of an anæsthetic as an aid in reaching a conclusion. Ether, it was claimed, would remove the reflex muscular protection of the joint in ostetic disease, and, with nature's protection removed, undue traumatism might be inflicted; and, under the influence of this traumatism, encysted tubercular material might be broken up, and a fresh infection occur. He recognized the fact that tubercular disease must run a long course, and he had long since ceased to expect any "short cut" in the treatment of these conditions. Scientific mechanical treatment places the joint under the best local conditions for repair, and aids nature, by climatic and other influences, in reaching the period of self limitation, but, after disintegration of the joint had once occurred, there was no apparatus that would cure hip disease, any more than a splint would cure a fractured thigh. Reference was made to the report by Dr. Lovett and the author on "The Ultimate Results of the Mechanical Treatment in Hip Joint Disease," published in 1887. Notwithstanding the great care exercised, and the four years' limit which governed the investigation of the cases reported upon, there had been several relapses.

Attention was then called to the fact that many surgeons ignore the neuro-muscular symptoms of hip joint disease, and to the fact that the anæsthesia removes the true reflex muscular spasm; that the absence of pain was not a safe criterion; that the absence of abscess afforded no positive evidence of the cessation of the disease, and that the patient could stand a very severe concussion of the joint without pain or flinching, and yet be suffering from extensive and progressive tubercular disease; that abscesses and sinuses might exist (unconnected with the joint), and yet the patient be free from the necessity of mechanical treatment, and that sinuses might close and abscesses disappear with active disease present.

The author then stated that only two elements existed upon which a positive opinion could be based, viz.: (1) The gait and attitude of the patient, and (2) the character of the resistance to joint motion thus obtained. He divided the limp into three classes: (1) The limp of true disease; (2) the limp of a vulnerable joint in the convalescent stage; and (3) the limp of shortening and disease, all of which were described.

The important element, however, was the neuro-muscular protection of the articulation. He described it as a purely involuntary and instinctive effort on the part of nature to prevent traumatism. Without this element present, we are unable, as a rule, to make a diagnosis of hip disease, and if it were not present there would be no deformity. The mechanical treat-

ment should be directed not only to the deformity, but to the disease, and the necessity of controlling the knee was pointed out. The author's experience led him to advise the use of the old Taylor traction splint, with the rigid pelvic band, and double perineal pad, in securing the proper modification of traumatism at the hip, and in controlling the knee; and he spoke rather disparagingly of any splint in the stage of convalescence which permitted motion of the knee. He also stated that we need not fear the effect of prolonged mechanical treatment as much as the unheeded cry of the diseased joint for proper protection.

The following conditions contra-indicated the removal of the apparatus: If manual concussion produces pain or flinching; if there is considerable deformity without anchylosis; if there is a true joint limp, or if there are abscesses or sinuses connected with the joint; or if there is a true refle; muscular spasm limiting movement slightly in all directions; if there is almost perfect flexion, with the other movements considerably or markedly limited; if flexion and abduction and adduction are excellent, with rotation and extension limited; and, finally, if all the movements are nearly normal, except rotation inward during flexion (the limitations being due to the neuro-muscular protection), it is not safe to discontinue mechanical protection. Rotation inward during flexion is always the last motion to recover, and this may remain for several years after all the other signs have disappeared, and in many cases it still remains after the joint had recovered; but in the latter case its reflex character disappears.

Attention was called to the fact that even after the limp had entirely disappeared, a relapse may occur. A recent case occurring at St. Luke's Hospital was cited as an example. From this and other similar cases, the author draws the conclusion that there is a recognizable stage of hip joint disease which antedates the limping stage.

Excising the joint was then referred to, and the conclusion reached that in the absence of signs and symptoms by which we can exactly determine the extent of the lesion, and with the great difficulty, not to say impossibility, of a complete excision of the acetabular portion of the joint, excision of the joint was an unsatisfactory, and in many cases an unsafe, operation, and that mechanical treatment, while more difficult and requiring special training to make it successful, promised more satisfactory results both as to life and usefulness of the affected member.

The conclusions were as follows:

In the first apparent stage of tubercular disease of the hip joint, when there is no deformity present, and where we have only the neuro-muscular signs or the slight limp, or both, to guide us, as well as in the more severe forms of the disease, where tubercular disintegration of the joint had commenced, and when the muscular protection of the articulation is more pronounced, the only safe guides for discontinuing mechanical treatment are: (1) The absence of the expressive attitude and gait of tubercular osteitis of the hip joint, and (2) an essential modification or an abolition of the instinctive neuro-muscular protection of the articulation; (3) that in all but exceptional cases a relapse as to the deformity or the disease, or both, is likely to occur as the result of the traumatism of locomotion, unless proper mechanical protection is maintained until the articulation is free from true reflex muscular spasm, or is anchylosed.

DISCUSSION.

Dr. A. B. Judson shared in the general wish for more certain indications in the convalescent period. He agreed with Dr. Shaffer in thinking that the reflex or neuro-muscular signs are by far the most valuable indications of the condition of the joint. He never resorted to the use of ether in examining the joint, or to the more atrocious barbarism of striking the patient's heel till pain is produced. A patient of his had described the sensation of reflex action by saying that it resembles the general sensation felt in a swing when the descent from the highest point begins.

As but few of the superficial muscles are found, by palpation, to be contracted, he thought it likely that the intrinsic muscles—those beyond the reach of palpation—are chiefly affected, and suggested that probably the muscles exhibiting these phenomena are those which, like the adductors, have their origin and insertion in the bones which enter directly into the composition of the joint. The patient or the mother is sometimes alarmed by the discovery of the rigid adductor muscle, which is thought to be a morbid growth, or an abnormal bone, till it is shown that a similar thing is produced on the well side, when an effort is made which throws the adductors of that side into tonic contraction.

He thought it well to note the variety of these reflexes. Fixation of the joint is produced by a tonic contraction; but motion, especially in the early and convalescing periods, is asserted at a varying point, when a considerable arc has been transversed, by a muscular spasm, often recognized by the patient. Dr. Fayette Taylor, observing with still greater refinement, had classed "reluctance to relax," shown by the circumarticular muscles, among the reflex signs of incipient osteitis.

Dr. R. H. Sayre said that if the signs of reflex spasm continued, there was but little doubt that an unprotected joint would become deformed. An experimental removal of the apparatus seemed to be the only way of deciding about discontinuing mechanical treatment. It was true that the late Mr. Thomas said that any one who could not tell the day and hour when the disease stopped ought not to treat joint diseases; but his remarkable insight would appear to be quite exceptional. The existence of internal rotation and flexion he did not consider to be so significant as the author stated, for a hip which recovered with impaired motion was not necessarily a vulnerable one. It was highly important to distinguish carefully between the limitation of motion resulting from a deposit around the joint, and that due to reflex spasm. In the former there was not likely to be any damage to the joint from the removal of protecting apparatus.

Dr. Whitman thought the case cited in the paper, which proved fatal as a result of prolonged suppuration, should have been treated by excision; for he had seen a number of apparently hopeless cases of this kind recover after such an operation.

Dr. H. W. Berg thought that reflex muscular spasm was an unconscious, as well as a conservative, effort of nature, and therefore he could not understand how a description could be given by Dr. Judson's patient of the sensation produced by this spasm.

Dr. Judson replied that the reflex action in question, when spasmodic, resembles the ordinary reflexes, such as respiration and nictitation, in being recognizable by the patient.

Dr. Myers said that the case at St. Luke's Hospital, referred to, had been examined repeatedly for six

weeks after all pain, deformity, and limp had disappeared, and the reflex muscular spasm was always detected. He had found the suggestion of Dr. Shaffer, to carefully avoid outward rotation during flexion tests, a very practical and valuable one, and had also noted that the same care should be used in testing abduction to avoid outward rotation, as the reflex muscular spasm at times could only be detected at the very extremes of motion. Dr. Myers said that during his observation of hip joint disease under the tuberculin treatment at St. Luke's Hospital, he had made daily careful examinations, and had come to the conclusion that the reflex muscular spasm was the first symptom affected. In the more marked cases, the symptoms, though lasting but a few days, exactly resembled the usual exacerbation of the disease, with increase of reflex spasm, less motion, or even deformity, increase of pain, and sensitiveness, and recurrence of night cries. In less marked reactions, several times the reflex muscular spasm became more alert though there was no rise of temperature, nor appreciable increase of joint sensitiveness, or decrease of motion. He believed with the reader of the paper that this spasm was the first and last symptom in hip joint disease. The tubercular process he thought was self-limited, and therefore, the indication to avoid traumatic reinfection was imperative.

Dr. Samuel Lloyd referred to a case of hip joint disease, which he had had under observation, in which there was a recurrence after a period of nearly nine years. The proper time for the removal of apparatus could only be determined by experiment in each case. Lately, he had been endeavoring to assist the mechanical treatment of suppurative cases, by injecting a ten per cent. emulsion of iodoform in glycerine, and the results so far had been quite beneficial.

The Chairman thought that the question of the self-limitation of tubercular disease would account very satisfactorily for the varying results obtained in the removal of apparatus. The only absolutely reliable guide was the existence of reflex muscular spasm, and although he had studied this symptom carefully for many years, he was compelled to admit that in a certain proportion of cases it was very easily confounded with the mechanical resistance resulting from changes about the joint. The cases of so-called relapse, he was inclined to consider as a development of new foci of the disease.

He had been interested in the author's remarks about the fallaciousness of the ether test, and the useless traumatism often inflicted upon joints by improper manipulation and examination.

Dr. Shaffer, in closing the discussion, said with reference to the sensations of the patient resulting from reflex spasm, that as long ago as 1876, a very intelligent gentleman had compared this sensation to that experienced upon attempting to dodge a blow aimed at the stomach. The intrinsic muscular element would not explain the phenomena of reflex spasm, as was shown in knee joint disease, where the gastrocnemius muscle resists attempts at moving the knee joint, but allows of motion at the ankle joint. He believed that reflex spasm required for its development a peculiar specific irritation within the joint, probably of the nerves in the epiphysis. The very fact that this spasm is beyond the control of the patient's will renders it such a reliable guide in diagnosis and in deciding when to remove the apparatus. As regards the question of excision in the case referred to, he had not presented the full history of the case, and consequently had omitted to say that the father absolutely refused to give his consent to this operation. He thought all orthopædic surgeons recognized the self-limitation of tubucular disease, especially since the able paper published some years ago by Dr. Austin Flint. With regard to relapses, he felt that the traumatism of locomotion was sufficient in many cases to destroy the encysted condition of the tuberculous deposit about the joint, and hence, to produce a fresh infection with tubercular material of the vulnerable tissues in the capsule.

IRON CASTS AND COAPTATION SPLINTS.

Dr. Whitman spoke of the advantage of employing iron splints in cases, particularly about the feet, where perfect apposition is desirable. A rough cast of the part is taken in plaster of Paris and sent to the iron founder, who produces an iron cast at an average cost of one dollar. On this cast, very light metal splints can be readily and accurately molded.

Simulated Tuberculosis.—1. Children exhibiting symptoms commonly spoken of as "tubercular," sometimes recover and sometimes die. The mortality is greatest when the inflammation is cerebral, next greatest when it is peritoneal, and probably least when it is pulmonary. But in no case are the symptoms in question to be regarded as inevitably fatal.

2. Of the children properly included among the "tubercular," those that die are not always found to fulfill that description in the strict anatomical sense of exhibiting gray granulations, whilst those that recover (at least for a time) are not necessarily free from such granulations.

3. The real pathological unity of all cases of so-called tuberculosis is sufficiently shown in those that die (some rare examples expected where death occurs before the development of these morbid changes), by the character and seat of inflammation, enlargement and often caseation of bronchial or mesenteric glands, intestinal ulceration, tumid Peyer's glands, or some of these conditions. The gray granulation commonly called tubercle, is no necessary accompaniment of such anatomical changes. It is a liability more or less probable according as the inflammation invades the brain, the abdomen, or the lungs.

4. The highest mortality by far of tuberculosis, whether expressed in meningitis, broncho-pneumonia, or otherwise, concerns young children between infancy and four years of age. Precisely the same period covers the highest mortality by far of these same inflammations, when not tubercular.

5. Tuberculosis in young children is contracted rather than inherited. Among provoking causes, the occurrence of measles in very many instances marks the commencement of a decline ending in that way.

6. The prostration which sometimes follows diarrhœa, broncho-pnuemonia, and other acute affections of infants and young children, may show symptoms not always to be distinguished from tubercular men ingitis. Similar symptoms may be provoked also by the methods of depletion formerly in vogue whenever acute inflammation was suspected. But, while the diagnosis may thus be left in doubt, the indications afforded by these symptoms remain the same, the existence, namely, of dangerous asthenia and the need of stimulation and food.—Sturges, *Med. Press.*

The Times and Register

A Weekly Journal of Medicine and Surgery.

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PENNSYLVANIA STATE MEDICAL SOCIETY.

THE Forty-first Annual Meeting was held in Reading last week. About three hundred physicians were present. The weather was very warm, and the visitors could form some idea of what Reading must be in midsummer, situated as the city is, in a basin, surrounded on all sides by hills that intercept the breezes. The first session was occupied by the reports and other business; with addresses by Mayor Merritt, and Dr. S. L. Kurtz, of Reading. In the afternoon the address on Medicine was given by Dr. J. C. Lange, of Allegheny, and that on Hygiene by Dr. A. B. Brumbaugh, of Huntingdon. Dr. J. M. Batten, of Allegheny, read a paper upon Tapeworm; discussed by Drs. Tyson, Cooper, and Earley.

The Society then paid a visit to the Reading Hospital. This institution is located on rising ground, overlooking the city, and has decided advantages over it in the way of catching the cooling breezes. The hospital is new, well built, and in perfect order. In its construction the advantages of having plenty of elbow-room are shown, the possession of ten acres of ground allowing free chance for lateral expansion. The wards are wide, with high ceilings, and the cubic space per bed is very large. One wing has just been erected by the generosity of a member of the Board of Managers, as a memorial to his wife, Mrs. Anna Wootten. This wing contains two wards with six beds in each; and eight private rooms, each furnished neatly with brass or enameled iron bedsteads, etc. At the outer corners are projecting corridors ending in single rooms, in which are located the bath-rooms, water-closets, and rooms for contagious cases, which are thus isolated. The nurses' rooms are in the upper story. Everywhere neatness, cleanliness, and order prevailed, with plenty of room. In the basement, under one of the projecting wings, is a small operating room. The hospital has but one objectionable feature, its distance from the center of the city; but this is counterbalanced by the numerous advantages gained by the location. The institution is governed by a Board of Managers; and has, in addition, a Ladies' Aid Association, whose members dispensed most charmingly the hospitality of the institution to the visitors. The ladies have raised a large sum of money for the institution. The hospital accommodates fifty-six patients, but has not, as a rule, more than forty in its wards at any time. The reserve is not large, considering the needs that might at any time occur, should a great accident happen in the vicinity.

In the evening, the Society listened to an address from the President, Dr. Alex. Craig, and then adjourned to attend the reception tendered by the Berks County Society. The committee of arrangements deserves special commendation for the manner in which this reception was conducted.

On the second day, an address was made by Dr. Samuel Ayres, of Pittsburg, and several papers were read. The feature of this day should have been the discussion upon tubercular consumption; but, unfortunately, all those who were down for papers or speeches were upon one side—that opposed to the specific theory. Such "packing" of the assembly in the interests of one side destroys all interest in a discussion. Dr. Flick sustained his side manfully, but the force of numbers was against him. During the afternoon a number of the members made an excursion over the Mt. Penn Gravity Railroad, and came near meeting with a frightful accident—the mechanism of the cable becoming deranged. In the evening there were receptions given by several of the leading citizens.

On Thursday the addresses on surgery, ophthalmology, and obstetrics were given. Out of the six addresses four had been assigned to Allegheny county. In the afternoon St. Joseph's Hospital was visited, and an excursion taken over the Neversink Mountain Railroad to Klapperthal, where music, dancing, and luncheon prevented the members thinking too sadly of their absent wives.

Dr. S. L. Kurtz, the Chairman of the Committee of Arrangements, was elected President of the Society for the coming year. The other officers were re-elected. While the meeting was not very large, there was a notable preponderance of country members; and the wisdom of holding these meetings in the smaller cities was again demonstrated. The papers were better than usual; far too good to be buried in the Transactions. Dr. Mays' paper was especially commendable, although he took a stand that is not very popular at present. Dr. Anders' paper on asthma elicited some discussion, bringing Drs. Tyson, Roberts, and Anderson to their feet.

The hall in which the Society met was very defective in acoustic properties, and speaking from the stage was exceedingly difficult. Among those present were Drs. Brinton and Holland, of Jefferson College; Tyson, Musser, Roberts, Leidy, and Willard, of the University; Keyser, Montgomery, and Anders, of

the Medico-Chirurgical. Although a number of ladies are members of the State Society, and several were present, not one presented a paper, or, we believe, took any part in the discussions.

The next meeting will be in Harrisburg.

Annotations.

DR. GRIFFITH J. THOMAS died June 9, at Mercy Hospital, Pittsburg, of blood poisoning. Dr. Thomas had assisted at a surgical operation on the preceding Sunday, and the poison entered through a boil on his wrist. Thus prematurely closes a life full of promise. Dr. Thomas was a native of Wales, and fully endowed with the perseverance and industry of his race. Without any means he worked his way through the Pennsylvania State College at Bellefonte, earning his tuition and his livelihood by coaching other students, working as a printer, and by any other work that presented an opportunity of earning a dollar. Coming to this city he entered the Medico-Chirurgical College, and sustained himself in the same honorable manner during the three years of his medical course. Many of his fellow-students are indebted to Dr. Thomas for the pains taken by him to instruct them while carrying on his own studies. This spring he graduated with honor, winning the Spencer Morris prize of fifty dollars. At the competitive examination for residents at the Philadelphia Hospital, he stood eleventh in a list of fifty-six, while in the examinations for Mercy Hospital, held in Pittsburg, Philadelphia, and New York, he passed at the head of the list. Of such stuff true men are made. With such a record it is little wonder that his teachers looked upon him as one who would reflect honor on his Alma Mater by achievements beyond the average. But, alas! he has fallen in the first battle, and his life, so full of promise, is cut short at the beginning of his career. It cannot be that so much of value is lost utterly; that this long and painful course of preparation is simply wasted. If nature exhibits such care to preserve the ultimate elements of material existence, it is impossible that such a waste of the nobler, spiritual, existence can occur. And such deaths, more than all else, lead to the irresistible conviction that this life can be nothing more than the preparation for another.

HOW often the Bible maxims come into one's mind, with their wisdom unfailingly true to-day as when they were first uttered. Dr. John H. Rauch may now realize that a prophet is indeed not without honor save in his own country. Dr. Rauch's name is known all over the civilized world, and honored for his good work in behalf of American medicine; yet we read with amazement in the *Chicago Daily News*, of June 6, that the Illinois House refused to vote him his salary! The reasons for this action can only be found in the personal enmities made by Dr. Rauch in the discharge of his official duty. It is indeed difficult for a public officer to do his work honestly and fearlessly, without tramping on somebody's sensitive corns. And it does seem singular that the more ignorant and pretentious the quack, the more apt he is to obtain backing in political circles.

The matter was not settled at last accounts, as the Senate had not concurred in the amendment striking out Dr. Rauch's salary, and a conference committee will probably be called. Meanwhile the medical press should take pains to inform the legislators how highly Dr. Rauch's work is valued by those best qualified to judge of it. It may not be amiss to note that the legislative body that thus distinguished itself, then adjourned to witness a game of base-ball between its Republican and Democratic members. We are unable to state which side won the game.

AN editorial in a recent number of this journal on malarial hematuria has attracted some attention to this affection. We resurrect from its mossy grave in the Georgia State Medical Society Transactions a valuable paper upon this subject, which we print in this issue, together with a letter from the author touching the points mentioned in our editorial.

Letters to the Editor.

THE FIRST MIDWIFERY DISPENSARY.

IN the last number of THE TIMES AND REGISTER there is a notice of the New York Midwifery Dispensary, from which one would draw the conclusion that this institution is the first of the kind in this country. Such, I assure you, is not the case. To Lyman A. Berger, A.M., M.D., Professor of Obstetrics in the University Medical College of Kansas City, should be given the credit of originating the "dispensary" plan of treating obstetrical cases. In the Eleventh Annual Announcement (for 1891) of the University will be found this paragraph:

OBSTETRICAL DISPENSARY.—The dispensary, located in the College building, was opened by the Professor of Obstetrics two years ago, and has furnished clinical material for this department beyond the most sanguine expectations of its orginator. Meritorious students are selected to act as assistants, thus furnishing daily and nightly attendance throughout the year.

During the past winter every member of the graduating class (which numbered thirty) attended at least three cases of labor through the influence of this dispensary, and many of the middle-year students received benefit also. A young man who is studying with me, for example, attended four cases—one of forceps delivery in which he was assisted by the professor—although he was only in the second year's course. So that, as a "brilliant success," I believe the Obstetrical Dispensary of the University Medical College of Kansay City deserves equal credit with its Eastern followers.

I am, my dear doctor, your friend,

EMORY LANPHEAR.

P. S.—Careful examination of the accompanying catalogue will convince you, I am sure, that some of the schools in the East might well gather a point or two from Western brethren. E. L.

[We haven't any doubt of it.—ED.]

SALICYLIC ACID.

IN the last few years the number of new antiseptics, and other preparations, has increased to such an extent that I am inclined to say that they are rather perplexing to young physicians, and indirectly lead them to ignore the old remedies which have been long ago proved, and the physiological action of which is already known. Some physicians do not appreciate the usefulness of the acidum salicylicum, therefore I wish to state some formulæ where acidum salicylicum, in a variety of diseases, gave favorable results:

1. For unclean wounds, as a fomentation:

℞.—Acid. salicylici ..... gr. xv.
Aq. destillatæ ..... ℥vj.

2. For carbunculus, as a powder or a dressing:

℞.—Acid. salicyl. ..... ℈j.
Aq. destil. ..... ℥iv.
Glycerini pur. ..... ℥ij.

3. For herpes, as a rubbing:

℞.—Acid. salicyl.,
Spirit. lavandulæ .....āā ℥ss.
Spirit. vini gall ..... ℥iij.

4. For angina or catarrhus pharyngi, as a gargarismus:

℞.—Acid. salicyl. ..... ℈j.
Kali chlorici ..... ℈ij.
Aq. destill. ..... Oj.

5. For aphthæ, for rinsing the mouth:

℞.—Acidi salicyl. ..... ℥ss.
Aq. destil.,
Spir. vini .....āā ℥iss.
Aq. rosarum ..... ℥iij.

6. For laryngitis crouposa:

℞.—Acid. salicyl. ..... ℥ss.
Aq. destil. ..... Oj.
Syr. rubi idæi ..... ℥v.
S. Omni hora cochl. des. (Take it warm.)

7. For pneumonia, to lower the temperature:

℞.—Acid. salicyl. ..... ℥ij.
Fiat pulv.; div. in dosis No. 5–8.
S. 4 de die pulv. unus.

8. For rheumatismus articulorum:

℞.—Acid. salicyl. ..... ℥ij.
F. pulv.; divide in dosis No. 10–16.
S. Bis de die pulv. j.

Or:

℞.—Acidi salicyl. ..... ℈iv.
Spirit. vini, q. s., ad solut.
Aq. destil. ..... ℥v.
Syrup cort. aur. ..... ℥ss.
S. Omni bi hora cochl. mens.

As acid salicyl. is converted in the blood into natrum salicylicum, the formula may be as follows:

℞.—Kali jodati. ..... gr. xl.
Natri salicyl. ..... ℥iij.
Syr. cort. aur. ..... ℥j.
Aq. destil. ..... ℥vj.
S. 4 de die cochl. des. To be taken in a wineglass of water.

9. For seborrhœa, as a lotion:

℞.—Acid. salicyl. ..... ℥j.
Aq. destil. ..... ℥v.

10. For combustio, as an unguentum:

℞.—Acidi salicylici ..... ℥ss.
Unguent. simpl. ..... ℥v.

11. For eczema, as an ointment:

℞.—Acidi salicyl. ..... ℈ij.
Tr. benzoes ..... ℈j.
Ung. emoll. ..... ℥j.
S. Unguentum.

12. For hyperidrosis: *Vide* THE TIMES AND REGISTER April 4, 1891, p. 284.

13. For catarrhus vesicæ (chronic), as an injection:

℞.—Acid. salicyl. ..... gr. vij.
Aq. destil. ..... ℥vj.

Or:

℞.—Acid. salicyl. .....per se 5–10 gr.
Three or four times a day.

14. For clavus (verrucæ):

℞.—Acid. salicyl. ..... ℥j.
Ext. cannab. Indicæ ..... gr. x.
Collodium ..... ℥j.
S. Apply to the affected part with a camel's-hair brush daily—at morning and evening.

15. For fever:

℞.—Acidi salicylici ..... ℥ss.
Aq. destil. ..... ℥vj.
Syr. cort. aurant. ..... ℥iv.
S. To be taken in three doses during the day.

16. For typhus abdominalis:

℞.—Acidi salicylici ..... ℥ij.
Aq. destil. ..... ℥vj.
(Syr. cort. aur. ..... ℥s.)
S. Ter de die, c. m.

I have seen, very often, good results in using acid salicyl. as a substitute for iodoform, especially in wounds, ulcers, and in some skin diseases; also, in combination with iodoformium.

S. SEILIKOVITCH.
338 SPRUCE STREET.

MALARIAL HEMOGLOBINURIA.

IN regard to your three questions in editorial of April 11:

1. Malarial hemoglobinuria does occur where *no* medicine has been taken.

2. From histories of cases coming under my care where the first attacks have been mild and no medications used, they observe the same periodicity as the rest of the malarial group, and increase in violence each time.

3. Is covered in the article sent.

The adoption of the quinine treatment I think has lessened the mortality here at least 70 per cent. Preventive treatment is of much importance, as some cases have such a quantity of blood destroyed in the first chill that no medication is of any avail. It never occurs without previous malarial paroxysms, in my opinion and that of all the writers that I have been able to find.

Many cases of hemorrhage from the genito-urinary organs that are only transitory or of little importance, are diagnosed as malarial and spoken of as cures.

Reyes of Cuba, and Feraud of France, are the only writers that I known of that have made a systematic and thorough study of this disease, and they both classed it as hemorrhagic, as they went by the gross appearance of the urine. It occurs in such isolated localities that it is only of late years that it has been thoroughly studied.

The etiology is absolutely unquestionable, as is also the pathology.

It is a most prevalent and fatal disease in many sections of the South, and, in my opinion, is mostly maltreated. The jaundice is most rapid and intense; the hematogenic origin of which has never even entered the minds of most of our practitioners. So it is jaundice—liver—calomel.

I have heard a paper read advising no treatment in these cases excepting every effort to obtain the toxic effects of mercury, and have seen 10 grains of calomel given every three hours in efforts to produce this effect, interspersed with doses of acid to make it more certain.

I have used quinine in the South for some years, and with a free hand, and have never seen a case where I thought for an instant it caused hemoglobinuria. Large doses do not always produce it. Dr. Ferguson, of this city, had a patient who took, on a

bet, 480 grains at one dose, and did not get it. Fifty or sixty years ago quinine was used to a very limited extent, and they had the same disease. The latest Italian investigations, 1891, with especial reference to this subject, absolutely deny its production.

Why don't it produce the same effect in other diseases where it is used?

I find, as intimated in my article, that I have to use the quinine to a large extent hypodermically.

H. McHATTON, M.D.

MACON, GA,

The Medical Digest.

FRENCH NOTES.

A. E. ROUSSEL, M.D.

DR. TERRILLON in a report of one hundred removals of the breast, arrives at the following conclusions:

1. The danger of the operation is about *nil.*

2. A return of the disease seems to be the rule when the axillary glands have become implicated.

3. This relapse is most common during the first years after the operation; this period rarely exceeds six or seven years.

4. All malignant tumors and the mixed tumors of the breast should be freely removed; that is, the total ablation of the mammary gland is necessary. The same is true of the enlarged axillary glands when they exist.

5. A return of the disease may be operated upon one or several times, especially when it is possible to effect an immediate reunion of the skin.

This operation relieves the patient; removes for a certain time the ulcerations which sometime secrete a large quantity of liquid; finally successive operations seem to exert a happy influence on the progress of the malady.—*Bulletin de Therapeutique.*

GOLD IN DIABETES MELLITUS.—In the *Chicago Medical Recorder*, J. A. Robinson gives two cases of diabetes mellitus treated as follows: Anti-diabetic diet, and the chloride of gold and sodium, gr. $\frac{1}{30}$, thrice daily. Both cases recovered. In one, codeine, antipyrine, Cleman's solution of arsenic bromide, etc., had been used without benefit.

FOR excessive perspiration of the feet, Winogradoff advises an application of a five per cent. solution of chloride of zinc. The feet are first washed in tepid water and then the solution is applied by means of a sponge, the surplus being washed off after a few minutes. It is unnecessary to add that the application should be made only by the physician.

—*Med. Record.*

THIERSCH'S ANTISEPTIC SOLUTION.—The extensive use of Thiersch's solution (named after a German surgeon) in many modern abdominal, intestinal and bladder operations conducted at hospitals and frequently at the patient's residence, and in urethral and uterine irrigations performed at the surgeon's office, has induced the writer to recommend the combination of this solution (consisting of salicylic acid 2 parts, boracic acid 12 parts, in 1,000 parts of water), in form of compressed tablets each containing:

Salicylic acid, resublimed ..... gr. 14.
Boracic acid (boric) resublimed.... gr. 84.

Compressed in form of tablets.

To each tablet is added sufficient distilled hot water to measure one pint. The solution may thus be prepared as needed.—*Pharmaceutical Era.*

VON KAHLDEN says that slight degeneration of the renal epithelium is almost always to be found in acute phthisis. He thinks the condition a chronic parenchymatous nephritis, due to the toxic products of the tubercle bacillus. If this view be correct, we should find a similar condition after the use of tuberculin, in animals previously healthy. Truly, the laboratory has still much to do before the clinician can utilize this product intelligently.

CHLORALAMIDE has been used by Robert Main (*Lancet*) for a patient aged eighty years, with granular kidneys and a dilated heart. Thirty grains of chloralamide produced refreshing sleep and entirely took away the desire to urinate during the night. The sleep was refreshing, and followed by a sense of well-being in the morning; but also by a profuse epistaxis, with much congestion of face and neck. He warns against using the drug when the kidneys are so diseased as to interfere with excretion.

PYOKTANIN.—Burghard reports (*Lancet*) the use of pyoktanin in forty-five case of gonorrhœa, ulcers, etc. He finds the solution recommended by Stilling, 1 to 1,000, to be too irritating for ordinary use. A solution of 1 to 3,000 is strong enough for urethral injection, to begin with, increased cautiously. In treating ulcers, he finds pyoktanin peculiarly well adapted to out-patient practice. Stilling claimed that irritation was due to impurity of the drug, and recommended Merck's preparation; but Burghard found no different results follow when he used Merck's.

AT the Middlesex Hospital a case operated on by Mr. Hulke, well exemplified the difficulties that may occur in diagnosis. Mr. Hulke made an exploratory incision into a swelling occupying the popliteal space, which, he said, by its history might turn out to be a rapidly growing sarcoma, in which case it would be necessary to amputate in the thigh; however, it proved to be a suppurating bursa under the reflected tendon of the semi membranosus. Mr. Hulke remarked that this bursa often communicated with the joint, but he was led to hope it did not in the case under consideration, as he could not altogether empty it by pressure.

ETHERIZATION IN LARYNGEAL CROUP.—Dr. Fried. Betz, in *Memorabilien*, April 18, 1891, reports the case of a child, aged eighteen months, that presented the typical symptoms of laryngeal croup. The case appeared so hopeless that tracheotomy was, although proposed, rejected. Dr. Betz then proposed "etherization." Three drops of a mixture of ether sulph. 3 parts, acetic ether 1 part, mentholo. 1 part were ordered to be inhaled ever quarter of an hour, just as chloroform is inhaled. It was hoped that the cold from the evaporating mixture would contract the surface blood-vessels of the larynx, and thus reduce the œdema present. The child was seen again in two hours, and the condition had somewhat improved. The etherization to be continued, three to four drops every half hour. After six hours the condition was unmistakably better, so much so in fact, that the etherization could be dispensed with. A piece of intestine filled with ice was placed round the child's neck. After this progress was so rapid that in twenty-four hours the child was out of danger. In desperate cases one would think the application in this way would not be likely to do any harm, and it would in any case lessen sensibility, and to some extent the torments incident to such a dreadful disease as laryngeal croup.

BLOOD-LETTING.—Besides the mere question of the value of bleeding in the mind of a medical man, there are two other considerations which influence him in his procedure. There is first his own personal reputation to be thought of, for just as the fashion of our forefathers was to "knock down" disease by every lowering measure, so the modern fashion is to "support" the patient. Consequently, if the latter died after bleeding, the doctor knew he would be blamed; but if he killed his patient by over-feeding, alcohol, or drugs, he would be thanked as having done his best. The other objection to bleeding which many men have is that they do not know how to do it; much less can they cup.

—Wilks, in *The Lancet.*

TREATMENT OF SYPHILIS (Dr. Leloir).—The specific treatment should not be prescribed before the appearance of secondary symptoms, and the preference should be given to mercurial frictions; a drachm of mercurial ointment rubbed into the thighs daily for a fortnight, then a cessation for another fortnight, and so on for ten months, after which period the frictions should only be made ten days a month, until the end of the second year. If any cephalalgia persist, forty grains of iodide of potassium daily for a few days will remove it. The internal administration of mercury should be reserved for married women who do not suspect the nature of their malady, for those whose skin is very tender, and for those who want to conceal their disease. Dr. Leloir recommends, in order that the skin may not be irritated by the mercury, that the ointment be prepared with benzoaled lard, and that twelve hours after the rubbing to wash and powder the part.

ARISTOL.—I have derived benefit from it in psoriasis, leg-ulcers, sinuses, fistulæ, eczema, ringworm, hyperidrosis, and bromidrosis. I have noticed no reference to its use by others in the two last-named affections. In sweating feet I have prescribed it alone as a dusting-powder; in bromidrosis, sometimes alone and at others combined with boric acid. It restrains profuse secretion and overcomes offensive odor. As diluents or vehicles I have often used with satisfaction the impure carbonate of zinc, the subnitrate of bismuth, the ointment of the oxide of zinc, or of subacetate of lead. A salve containing ½ drachm to the ounce of excipient is serviceable in acne and rosacea, and a suppository composed of 5 grains of aristol with 3 grains each of camphor and lupulin can be recommended for lencorrhœa and pruritus. An aristol gauze has lately been brought into use as an antiseptic dressing. It is made by impregnating gauze with an ethereal solution, and contains from 15 to 30 grains per square yard.

—Shoemaker, *Med. Bulletin.*

THE TONGUE AS A RESPIRATOR.—It is not generally known that nature has provided each of us with the best respirator always at hand in the tongue. For years I have personally relied on this alone, and have recommended this proceeding to many patients. When facing a cold east wind, or breathing quickly the night air, I never quite close my mouth, but purposely keep the lips a trifle parted, and at the same time curl up my tongue towards the roof of my mouth until the tip reaches as far back as the soft palate, and I gently press the arched under surface of the tongue in some degree against the hard palate (a little practice soon makes this easy to do). The cold air then, as it enters the mouth, strikes against the under surface of the tongue, as well as the floor and sides of the mouth, and is made to pass in a somewhat circuitous manner between the sides of the tongue and the buccal mucous membrane to the pharynx, being thereby warmed in its course, so that by the time it reaches the larynx it is nicely rid of chill, and does not excite cough and catarrh. At the same time a certain quantity of air, of course, finds its way through the nasal passages to the chest, and it is obvious that a larger quantity of cold air can be effectually warmed by this method of procedure than by relying on either the nose or mouth alone. That the large blood-supply of the tongue renders this organ an excellent air warmer must be obvious to all.

—Scatliff, in *The Lancet.*

ANOTHER REMEDY FOR TUBERCULOSIS.—Dr. Franjen, of Berlin, was impressed with the pathological, anatomical, clinical, and perhaps bacteriological similarity of the tubercle bacillus to the bacillus of Lustgarten.

Following this idea he has treated in the Augusta Hospital fifty-two cases of lung tuberculosis with injections of hydrargyrum thymolo-aceticum, and internally iodide of potassium.

He administers:

℞.—Hydrargyri thymoli-acetici..... gr. xj.
Paraffini liquidi ..... ℥ijss.
Tere exactissime.
D. S. For subcutaneous injection.

Of this he injects a syringeful into the gluteal muscles every seven or ten days. After the second or third injection the patient receives:

℞.—Potassii iodidi..... gr. lxxv.
Aq. dest..... ℥vij.
D. S. Tablespoonful three times a day.

He sums up as follows:

"1. In the first stages I expect in a short time a decided improvement, which, if persistent, may progress to a cure.

"2. In most of the cases I have seen a more or less important improvement either of an objective or subjective nature.

"3. In the worst cases I have seen no harm follow this method."

TREATMENT OF PENETRATING WOUNDS OF ABDOMEN.—1. All cases of penetrating gunshot wounds of the abdomen demand laparotomy; most others also require it.

2. The operation should be done immediately after the injury if possible, so as to control bleeding before the patient is exhausted.

3. Any time within twelve hours may be regarded as the "time of selection," but the lapse of many hours, or even days, need not prevent operation, since death from septicæmia is likely to occur.

4. A condition of collapse is not an insurmountable contra-indication.

5. The existence of peritonitis demands, rather than forbids, an operation.

6. In gunshot wounds Senn's hydrogen gas test should not be employed, as the indications are *always to operate;* perforation of intestine is not necessary to render the wound fatal. In other penetrating wounds the test may be employed.

7. Laparotomy is, in such cases, comparatively an insignificant operation. Any surgeon of ordinary skill ought to be able to successfully operate.

8. In case of emergency the operation here described can be made without an elaborate set of instruments.

A success can be obtained by the use of only: (*a*) a knife; (*b*), scissors; (*c*), needle and thread; (*d*), hæmostatics; and (*e*), *good judgment.*

—Lanphear, *Med Review.*

Against Digitalis in Pneumonia.—We are told that digitalis reduces temperature, is a heart stimulant, slows and steadies the heart's action in pneumonia, and relieves dyspnœa, and consequently should be used, even in the first and second stages of this disease.

It is yet to be proven that it lowers temperature under any circumstances, except where it kills. It also remains to be proven that it slows and steadies the heart's action in the first and second stages of the disease, and that it relieves dyspnœa.

On the other hand, I affirm, and on the authority of eminent observers, coupled with my own experience, that in most cases in the first and second stages it increases dyspnœa, stimulates an already over-stimulated heart, renders the pulse unsteady and intermittent, as Dr. Loomis has said, tends to produce heart-paralysis, contracts the capillaries, and thus adds to the blood stasis in the lungs with increased venous tension and all its consequent train of evils. If pushed in the conditions to which I have referred it will almost inevitably produce death.

Veratria, with morphine and atrophia, until the third stage commences, in most cases, slows the heart's action without depression; dilates the capillaries, thus relieving the venous tension and the right heart; relieves dyspnœa; conserves the vital forces, reduces temperature and lessens the inflammatory process.

If there is dicrotic pulse, and especially from the use of digitalis, veratria, morphine and atrophia will relieve, as I have witnessed in multitudes of cases.

They should neither be pushed to their unpleasant consequences, since the desired results can usually be obtained without.—Carhart, *Jour. A. M. Assoc.*

Plugging for Epistaxis.—Take an elongated quantity of cotton wool, lengthwise of the fibers, which, when doubled upon itself, will be somewhat conoidal, and completely fill the naris it is intended for, especially the posterior end; but before doubling it upon itself fortifying the cotton by spiral turns of soft thread, such as is used by grocers, then, doubling the mass upon itself you have a cone of cotton, three or four inches long or more, from the smaller end of which extend the strings, which ought to be tied together, the knot to include some of the fibers of the cotton at the ends. Now, if thought necessary, this mass can be saturated with a solution of alum, but preferably it may be anointed with a little lard or vaseline. Now, with a thin probe or knitting-needle in the right hand the mass of cotton is to be caught in its fold at its larger, and what ought to be the distal, end of the cone, while the strings are caught in the fingers of the same hand, and you have now the cone of cotton wool extended upon your probe or knitting-needle and secured in your right hand; while, with the left hand, the point of the nose can be elevated and with a rather quick thrust the conoidal mass of cotton is carried back, until the yielding sensation is imparted to the hand which indicates that the distal end of the cone has emerged through the opening of the posterior naris into the pharynx. The slender probe or knitting-needle or grooved director, as you please, is now easily withdrawn by giving it a sudden retractive start, and the knotted ends of the strings are then cut off and tucked into the naris out of sight, to be easily hooked out and grasped for the removal of the cotton plug that it secures in its spiral folds.

It ought to be remembered that the direction of the floor of the naris, when the patient is sitting erect, is directly backward and a little downward, and also that the combined caliber of all the choanæ at the posterior naris is much greater than at the anterior naris. Hence, to plug successfully the cotton conoid ought to be three or four times larger at the distal than at the proximal end when *in situ.* And again, in making the insertion, do so with a quick motion and keep your probe close to the floor of the naris. A trial of this simple method will prove so efficient that I believe the surgeon will ever after resort to it in preference to any other.

—W. H. Daly, in *Brit. Med. Jour.*

The Treatment of Acute Vaginitis.—Of whatever variety, the distressing local symptoms of acute vaginitis—comprising heat, vesical and rectal tenesmus, painful micturition, and, at times, profuse discharge—can be best combatted, as a rule, by the combination of the wet and dry methods of local treatment. Should vaginitis, however, be secondary to or complicated with endometritis, special treatment is required for the endometrium. The dry method of treatment is more troublesome than the wet, since it requires the active attention of the medical attendant. Its employment, however, will prove more satisfactory in that it cuts short the ordinary duration of the disease, and tends to prevent complications arising from an extension of the inflammation to the uterus and ovaries.

After cleansing the vagina with a douche medicated with borax, a drachm to the pint of water; permanganate of potassium, sufficient to discolor water; or bichloride of mercury, 1 to 3,000, the vagina is dusted with aristol, iodoform, or bismuth and boracic acid, and the vaginal walls kept apart with a tampon of antiseptic cotton. The tampon should be removed daily, and the douche and dusting repeated. In the meantime, quietness in the recumbent posture and abstinence from stimulating food should be enjoined and the bowels kept in a soluble state. Vaginitis tends to recur after its apparent cure, on account of the folds of the lining membrane of the vagina retaining the discharge. The treatment, therefore, should be persisted in until all indications of the disease have passed away. Should spots of inflammation persistently remain after the continuance of this method of local treatment, the application of nitrate of silver will be found serviceable.

Of the importance of giving strict antiseptic attention to vaginitis when of specific origin there can be no question, on account of its tendency to extend to the Fallopian tubes and to impair their functional activity, if not to destroy it either through adhesions or suppuration.—Godfrey, *Med. Bulletin.*

Aristol in Atrophic Rhinitis.—The use of aristol in the treatment of atrophic rhinitis is, of course, but one factor in the attempt to regain an improved condition in this disorder.

Under all circumstances the first indication would be to get rid of the inspissated muco pus. For this purpose the most preferable, and at the present time the most popular method, is by means of the spray; and for this purpose, let me say, not alone on my own authority, that the small hand-ball atomizer is as good as a whole Sass outfit.

The spraying material used should be disinfecting to correct fœtor and decomposition; also, alkaline

because more solvent to the crusts. After the use of the spray, cleanse as much as possible the nares by gently blowing the nose, or by wiping with plugs of absorbent cotton.

Now, as a further step in treatment, we want an agent efficacious as a deodorizer and as a germicide; and, further, one mildly stimulating to the damaged acinous glands—one that, while acting antiseptically, will, at the same time, tend by its effects to increase the watery elements in the nasal secretion. It is to cover this part of the treatment that I recommend aristol as a drug of superior efficacy. It is antiseptic, mildly stimulating, with no unpleasant odor or sensation on application. It is easily applied by means of an insufflator and in its original powder form, in which it is immediately adhesive and partly protec tive. On the bare and bleeding surfaces left by the removal of crust, it thus forms a kind of improvised antiseptic dressing. The process of granulation seems to proceed with extraordinary rapidity under its use.

In this rapid sketch it has been impossible to go into the details of treatment of this disorder, its complications, etc. The cautery, the curette, the saw, the snare, are all, of course, brought into requisition on occasion; but I take pleasure, in recommending aristol, as to many men who devote special attention to this branch of surgery, I am aware of its having come in the light almost of a discovery.

I have lately been using aristol also as a dusting powder, following the use of the cautery, applied for whatever reason to the nasal cavity.

—W. C. Braislin, *Brooklyn Med. Jour.*

Results of Injuries to the Skull.—It frequently happens that after a severe accident, you have no difficulty in deciding the case to be one of fracture of the bone with compression, or after a light accident, one of a simple stun or light form of concussion which will probably recover in a day or two, but on the other hand, cases intermediate between these two classes occur which may baffle the surgeon as to diagnosis, and, therefore, render prognosis impossible.

I have known cases of concussion with loss of consciousness for a few hours only, die of suppuration within the brain. I have known men with extensive fracture of the base walk into the hospital apparently but little hurt, and die within a few days, whilst on the other hand, not rare instances occur in which recovery takes place with a foreign body embedded in the brain or after the most marked signs of extensive fracture of the base with compression.

From the cases which I am about to report to you, we shall gather—

That without serious injury death may result from thrombosis or septicæmia.

That with hemorrhage convulsions occur, or paralysis of separate nerves, or death by compression or shock.

That with paralysis of individual nerves we are not able to say that the power will be regained, even though we have reason to believe the paralysis due to hemorrhage and not fracture. On the other hand, convulsions where general or limited to individual nerves, usually subside.

That there may be the most extensive injury to the bones and yet not much displacement, and without damage to the brain.

That extensive fractures of the base may occur, and that the patient may be in a condition to walk to the hospital.

That secondary abscess of the brain may occur after a long interval of time.

Lastly, that the brain may be extensively damaged, even ploughed up by a bullet, and recovery take place.—Norton, *Med. Press.*

Surgical Treatment of Pleuritic Effusions.—It is well known that the usual method of septic infection is from the skin at the seat of puncture, which should therefore be properly asepticised by lotions sufficiently strong to destroy the micro-organisms, and should such not be to the hand of the physician, I would recommend the routine employment of tincture of iodine applied a short time prior to the puncture for some small distance around, as recommended by Dr. Fowler, of Brooklyn.

The other points I would draw attention to, are:

See that the needle is aseptic.

When introducing the needle have the skin well drawn down to ensure a valvular opening.

As the effusion is being drawn off allow the needle to lie obliquely so as not to injure the expanding lung or visceral layer of the pleura.

Septic effusions, whether primary or secondary, usually require surgical aid, and it is in such cases that a difference of opinion still exists, which at once shows that any routine method cannot be employed in all cases. It is, therefore, of importance, that we should be able in a given case to state the treatment which will probably be necessary, whether the moderately simple and safe operation of incision and drainage will suffice, or if it will be necessary to resort to the very formidable and serious operation of extensive rib resection, as recommended by Estlander, or if any of the many intermediate methods recommended may meet the requirements of the case, and I would here state that my experience has been such as to lead me to the belief that it is in a very small percentage of the cases Estlander's procedure is required, involving as it does, collapse of the lung and serious deformity to the patient.

That any one treatment cannot meet with the requirements of septic effusions is sufficiently shown by the very various and different conditions under which such effusions occur, which is best shown by a classification based on pathologic grounds. To illustrate my meaning I cannot do better than refer to the conclusions arrived at by Dr. Henry Bewley, in a paper read by him on this subject, before the Pathological Section of the Royal Academy of Medicine in Ireland, on January 10th, 1890.

1. Empyema is always caused by micro organisms.

2. These are of different species, there being no one specific variety.

3. In some cases ordinary pus-producing and putrefactive bacteria get into the pleural cavity through some opening in the chest wall or lung.

4. Some cases are associated with croupous pneumonia, and are caused by the pneumococcus.

5. Some cases are due to the action of the tubercle bacillus.

6. In some cases of pus-producing micrococci which have in some way got into the blood, but are not, if unassisted able to develop in the body, find in an inflamed pleura or serious effusion a locality suitable for their development, and under their influence a serious effusion becomes purulent.

7. Some cases are pyæmic.

—Heuston, in *Med. Press and Circular.*

MULTIPLE FRACTURES.—In the city October 15, 1889, I assisted at the birth of a boy, in whose cranium I found a very unusual deficiency of ossific deposit in the frontal, occipital and parietal bones; in fact, the whole vault nearly was without bony support or protection. I could see no deficiency in bones of the extremities, but there was double bow-leg as well as anterior curvature. Careful handling of the child was advised. On October 18 (three days later) was recalled to find left arm fractured at the surgical neck. In dressing this fracture the first step was to fix the shoulder by a double figure of eight bandage, one of course placed in front and the other crossed on the back. The second was to adjust a three and a half inch bandage neatly around chest, the upper margin of which was placed closely up into the axillæ. The third was to envelop the arm (and forearm) in a thin layer of absorbent cotton, retained by a lightly applied roller bandage. The fourth was the fitting on of a pasteboard splint, cut out at the elbow flexure and slotted at the top to properly encompass the shoulder, it having been immersed in hot water, over which was snugly wrapped a roller bandage. The fifth was to place the arm against the side, a strip of absorpent cotton intervening to help to trough the arm, then encircled the chest and arm from shoulder to elbow, with a roller bandage finishing by stitching together both this roller bandage and the former named chest bandage both in front and back of the arm as closely as possible, thus troughing and splinting the arm by means of the body. The forearm was then flexed to a slightly acute angle, the hand and wrist being supported and fixed by means of stitching the swing (in which the hand rested) to the chest bandage and anterior portion of the double figure of eight bandage. Dressing removed in three weeks. No excoriations. Union complete. November 6 was recalled, and found right humerus broken a little above the middle. Dressed in a similar manner. November 26 was again called, and found left tibia and fibula broken about middle. After shielding limb with cotton, applied a light plaster cast to limb, fixing both ankle and knee, and in this manner correcting, in a great degree (in this leg) both the bow-leg and anterior curvature. June 3 found right femur fractured about middle. Used plaster dressing and long splint. June 30 again found right humerus fractured just above the condyles; dressed it with a plaster cast. In this instance I "succeeded" in getting a moderate external angle, but no impairment of mobility whatever. This fracture was caused by the child raising his arms up over his head, and when bringing them down had struck the long splint yet on the right leg. August 30, two and a half months after its former fracture, I found right femur again broken at old site, caused by child being thrown out of a wagon. Dressed as before. Now, gentlemen, about two weeks ago this child was brought to me on acconnt of a skin disease, at which time his mother agreed to bring him to day that I might here present him, but this absence is thus accounted for: On December 31 this little one had nursed and gone to sleep on his mother's lap, and had let the left arm drop down between two rungs of the back of the chair, so that when the mother arose the arm caught, and was fractured with an audible snap, this time just above condyles. Gave the mother Churchill's Syr. Hypophosphites for two months after confinement. Distinct crepitus was gotten at each time of these fractures. There was no unusual thickening at site of union. Child has always looked well, and has grown as others ordinarily do.—Harvey, *St. Jo. Medical Herald.*

ARISTOL.—Dr. Alois Pollak recommends aristol as an antiseptic and as a remedy in various skin diseases, on the ground of experiments made in numerous cases. Inasmuch as this substance is insoluble in water, he employed it chiefly as a dusting powder, or in ethereal solutions or ointments. For obvious reasons, it cannot be utilized for disinfection of the hands, instruments, and the site of operation, or as an antiseptic during the operative procedure. On the other hand, it is very serviceable for the treatment of wounds after operations, or of neglected injuries. It has the great advantage of being effective in small quantities, so that wounds need only be covered with a thin layer; if desired, it may be diluted with sugar or milk. In all the cases treated by the author with aristol, the healing process took place without reaction. Fever never occurred, and, if present before operation, it disappeared regularly within the first few days after its performance. There was an entire absence of pains, granulations were developed with remarkable rapidity, and formation of epithelium took place promptly. The period of healing was remarkably short.

The cases treated with aristol comprise the following:

1. Anal fistula; incision and curetting; tamponing with aristol gauze after previous application of the powder. Cure in twenty days.

2. Abscess in the glutial region of the size of a fist, incision and insufflation of aristol. Healing accomplished in seven days.

3. Lymphadenites of the neck (tuberculous?); incision, extirpation; curetting; application of aristol in powder and tampons. Eight days later, fresh tubercle novules in the granulations and cicatrix. After a second enucleation and the use of aristol, healing took place.

4. Periostites of the mastoid process; incision, curetting, followed by application of aristol powder. Cure on the eleventh day.

5. Injury of the thigh by a rusty nail; wound has a discolored suspicious appearance, is covered by gray, necrotic granulations; curetting and application of 5 per cent. aristol ointment. Cured in fourteen days.

6. Necrotic ulcer, in consequence of a contusion; incision of the undermined margins; application of aristol powder. Healing ten days later.

In addition to these cases which are reported in full, the author mentions four minor operations for tumors; three extractions of foreign bodies; a wound inflicted by a pen dipped in ink; a lacerated wound of the scalp, with exposure of the bone; three cases of purulent adenities; three phlegmons, and several cases of buboes, all of which were successfully treated with aristol.

As regards the employment of aristol in the treatment of cutaneous diseases, he cites the following cases:

Eczema Scrofulosum.—Among ten cases, no curative effect was produced in six; in the remaining four it was slight. Hence, aristol is not to be recommended in this disease.

Eczema Marginalum.—In this affection, an excellent result was obtained, especially in old neglected cases, from the use of a 10 per cent. ointment with vaseline.

Varicose Ulcer.—A 5 per cent. ointment of aristol and vaseline was employed with advantage.

Pernio.—In the majority of cases a 10 per cent. solution of aristol in collodium, and later aristol plaster, proved very effective.

Owing to its convenient manner of application, aristol seems especially applicable for the physician's use in his office practice.

—*Deutsche Medizinal Zeitung*, April 2, 1891.

EXTRA PERITONEAL HYSTEROPEXY.—Fixation of the uterus to the abdominal wall may be executed in two ways, by the aid of a preliminary laparotomy, or without opening the peritoneum. The latter can be done by simply suturing the uterus to the abdominal wall, as appears to have been attempted first by Marion Sims in 1859, or by Caneva's process; that is, by first incising the linea alba down to the peritoneum.

I have put in practice these two procedures in the treatment of prolapsus uteri; once by the ventro-fixation without incision, and four times by Caneva's method. Sims' operation is not a sure procedure. I have had a relapse at the end of twenty days. It is true that the uterus was only fixed by a single thread, which I removed too quickly. Caneva's method has given me excellent therapeutic results, seven, four and one-half, three and one-half and one and one-half months after operation. I have undertaken the extra-peritoneal hysteropexy by preference, because when I published my first case, I believed that I had the first idea of the extra-peritoneal suture, while later I have found unjust the accusations directed against this operative procedure; besides it is simple and rapid.

The patient having been prepared as for a laparotomy is placed upon a table similar to that employed by Trendelenburg for the hypogastric cut. When the patient is asleep an assistant introduces two or three fingers into the vagina, and pushes the uterus up towards the abdominal wall. Utilizing the uterus as a point of *appui* and guide, a cutaneous incision is made of five to eight centimeters. The linea alba is incised to the same length. The pelvis is then raised until the axis of the body makes with the plane of the table an angle of about 45°. By this manœuvre, that disembarrasses the operative field of the omentum and intestines, the fingers pressing into the wound can readily distinguish through the thin peritoneum all the details of the dimensions and configuration of the uterus. Women who have for many years had uterine prolapse have almost no sub-peritoneal adipose tissue, and following with the finger the anterior face of the uterus from the fundus to the neck, one can in a moment distinguish very exactly the line of adherence of the bladder, marked by a difference of the level of the consistence. One centimeter above this point is placed the first ligature; the second fixes the fundus, and the third is placed midway between these two. If the uterus be small, or in senile involution, two ligatures suffice. The suturing is aided by the use of a Reverdin needle, curved or half-curved. The needle penetrates directly into the right muscle, traverses the parietal peritoneum, enters the uterus at the junction of the anterior and lateral faces, penetrates about one centimeter into its thickness (less if the uterus is small), then is brought out horizontally following the way inversely. The thread, (twisted silk, No. 4), are tightened and tied in the wound, left hanging from the wound, and removed about the fortieth day; or, better, cut short at the knot (buried sutures). The integuments are sutured with cat-gut. The operation has excellent sequences. The patients have neither pain nor fever. It is often necessary to catheterize for the first days.

The objections are:

1. The danger of injuring the bladder. There are two means of avoiding this; the exploration by means of the finger, that shows exactly where the bladder begins and the uterus ends, and in doubtful cases a catheter may be introduced.

2. The danger of wounding the intestine. In the dorsal decubitus, even when the uterus is pushed up to the abdominal wall, this simple manœuvre is not sufficient to relieve the uterus of the intestines, but by elevating the pelvis to 45°, with two fingers in the vagina supporting the uterus, it is glued so exactly to the abdominal wall that nothing, absolutely nothing, can separate the serous covering of the uterus from the parietal peritoneum. I have proved this once by making a button-hole incision in the peritoneum, and once again when I had to make an intra-peritoneal hysteropexy, because the uterus after reduction remained in retroflexion.

3. One cannot see what is being done. The hysteropexy, pure and simple, may become a laparotomy. Whenever, on the contrary, it is necessary to look into the true pelvis, to tear up adhesions, to complete a diagnosis by sight of the adnexa, or to proceed at the same time to an oöphorectomy or a salpingo oöphorectomy, the intra-peritoneal method is indicated clearly, and a simple ventro-fixation is not in question.

Hence, extra-peritoneal hysteropexy is contra-indicated in prolapsus complicated by a lesion of the adnexa; also in adherent retro-deviations, where laparotomy permits other procedures of liberating the uterus. It is also contra-indicated by non-adherent retro-deviations, because one of the elements of perfect adaptation of the uterus to the abdominal wall is the relaxation of the uterine ligaments observed in prolapsus alone. In simple, uncomplicated uterine prolapse, the extra-peritoneal hysteropexy is a simple and rapid operation, presenting none of the dangers attributed to it.—Assaky, *Le Bulletin Médical.*

Medical News and Miscellany.

SMALL-POX is spreading in Cuba.

DIPHTHERIA prevails at Bloomington, Ill.

A DEATH from chloroform occurred at the Samaritan Hospital, London.

CHROMIC acid, mixed with alcohol, exploded, and cost the druggist an eye.

THE *Chicago Medical Record* has lengthened its name, and is now the *Recorder.*

HUNDREDS of Alaska Indians have died of influenza, that is still prevalent in Kodiak.

FLOYD V. BROOKS, M.D., has removed to No. 465 Florida avenue, N. W., Washington, D.C.

THE smuggling schooner Halcyon is said to be on her way to the Pacific coast with $1,000,000 worth of opium on board.

AUSTRIA is about to appoint female physicians to the hospitals for Mohammedan women in Bosnia and Herzegovina.

INFLUENZA has reappeared in Edinburgh and Glasgow; while Paisley is recovering from an epidemic of measles.

KAPOSI says that Koch's lymph is not a curative agent, this opinion being based on the use of the lymph in lepra, and other skin diseases.

DURING the last seven years thirty six women have passed the primary examination for physician's license in Japan, and eight have passed the final examination.

MANCHESTER, England, reports the influenza as appearing in a more severe form than in 1890. In the North of England it prevails extensively.

DR. ERNEST HART, of the *British Medical Journal*, visited Japan in March, where he met with a cordial reception from the physicians of that country.

THE catch of cod at Finnmark is said to be the largest known; and Norwegian oil will hence be more plentiful than ever.

FLEAS are said to be effectually routed by dropping a few drops of carbolic acid on bits of paper, rolling them up, and placing them in different places around one in the bed.

A FRENCH pharmacist received a prescription for apomorphine. Not having it in stock, he substituted morphine, and the patient died narcotized. The chemist got three months in prison.

THE Chicago W. C. T. U. has appointed a committee to investigate Keely's method of curing drunkenness. Keely is the chloride of gold man, and he is reaping a harvest, and doing some good.

IN Scotland a curious question has arisen in regard to notification of infectious diseases. Suppose the physician who sends the notification has made a mistake, is he entitled to the fee provided by law?

SACCHARINE and soda, in solution, sprinkled over gooseberry bushes, is said to destroy the grub and to give the fruit a peculiarly sweet taste. Has any one noticed the effect of saccharine on the disposition?

AN Arkansan sued a druggist for giving, as alleged, ergot instead of sarsaparilla. Ten-drop doses of the ergot were alleged to have injured his pregnant wife $10,000 worth. Judgment was given for one cent damages.

THE Eleventh Annual Meeting of the Lehigh Valley Medical Association will be held at the Mansion House, Mauch Chunk, Thursday, June 25, 1891. The address will be given by Prof. H. A. Kelly, of Johns Hopkins University.

A QUESTION has arisen as to whether lead miners ever suffer from lead poisoning. A writer in the *Lancet*, who practices among the Australian lead miners, says that they suffer very frequently from lead poisoning.

CHLAPOWSKI reports the death of a woman from one 15-grain dose of salol. The patient became restless and unconscious, pupils dilated, pulse irregular, constant vomiting, urine dark and containing salicylic acid. The case had been one of gastro-enteritis.

A JAPANESE physician in Yokohama has been charged by a patient with an assault while the latter was under the influence of an anæsthetic. *Sei i-kwai*, commenting on this case, cautions physicians against the use of anæsthethics except when another physician is present.

A PASTE WHICH WILL STICK ANYTHING.—A paste which will stick anything is said by Professor Winchell to be made as follows: Take two ounces of clear gum arabic, one and one-half ounces of fine starch and one-half ounce of white sugar. Dissolve the gum arabic in as much water as the laundress would use for the quantity of starch indicated. Mix the starch and sugar with the mucilage. Then cook the mixture in a vessel suspended in boiling water until the starch becomes clear. The cement should be as thick as tar and kept so. It can be kept clear from spoiling by the addition of camphor or a little oil of cloves.—*Meyer's Druggist.*

NEW YORK druggists are very cautious in the sale of poisons. A Philadelphia professor recently found it impossible to obtain a half-ounce of chloroform to remove a grease-spot from his coat until he had written a prescription that would pass the pharmacist's scrutiny.

DARBY AND JOAN.—A discussion as to aged couples in the workhouse having special rooms allotted to them took place at the Middleborough board of guardians, and it came out that the board were compelled, should the couples desire it, to provide apartments; but, as a matter of fact, they never desired this accommodation, but preferred to live apart.

RUSSIA has queer laws and regulations. Until recently women could not study pharmacy in that country. As it is now, a druggist who has female apprentices can not also take male students. Perhaps this is done through sympathy for the boy who would have all the heavy work to do and none of the light, if a girl was in the store.

A PROPHYLACTIC measure against plumbism is advocated by Miura. He advises workers in lead, at each intermission in work—particularly before meals—to wash the hands with tartrate of ammonium. By these means much of the lead that would otherwise find its way into the system is removed. Washing with soap and water has long since been found a very useful preventive; its cost is slight, and it is always to be found with that minimum of personal exertion that is the first essential in a prophylactic to be used by the workingman.

THE Paw-Wop Botanic Medicine Company is said to be doing a missionary work among grocers, similar to the green goods men. Their agents are said to sell a bill of groceries at fabulously low figures to the grocery men; and at the same time a bill of patent medicines; for the latter receiving cash on delivery. The saving on the groceries more than pays for the medicines, and the grocer is away up in G as to profits; but unluckily the groceries fail to materialize. And then the grocer turns in to sell his stuff, and swears he'll never, never, do it any more.

THE following were the operations of the Philadelphia Woman's Hospital during May: Patients treated in the wards, 118; new patients treated in clinics, 477; as follows: Gynecological, 180; medical, 81; surgical, 50; eye, 54; ear, throat and nose, 60; electrical, 35; dental, 17. Visits to morning clinics, 1,907; new patients in out-practice, 40; visits to out-patients, 200; prescriptions compounded, 2,477; births in hospital, 16; births in out-practice, 1; operations in clinic, 22; operations in house, 21; nurses in training, 56.

THE Twelfth Anniversary services of the Philadelphia Medical Mission was held last Sunday evening at Bethany Presbyterian Church, Twenty-second and Bainbridge streets. The Rev. J. Wilbur Chapman, D. D., pastor of the church, presided. After the devotional exercises he made a few remarks, and said he took a great interest in the Medical Mission; that it would be the blackest darkness in that section of the city were it not for the practical work of the mission. The annual report showed that there had been much good work done in the way of religious meetings, visits to prisons, houses of ill-fame, etc., and in addition 2,222 persons received medical attendance at the mission or at their homes during the year. In the past twelve years 47,587 persons have received medical care at this institution.

THROUGH the medium of an English journal our valued contemporary in Boston has got hold of an old item from THE TIMES AND REGISTER as to the matrimonial prowess of the trained nurse. It seems, however, that the Boston variety is to be excepted; and, even with the victim stretched upon a sick bed, and therefore helpless, with the unrivaled opportunities for surrounding him with an environment of womanly tenderness and feminine comforts, the Boston nurse cannot secure her prize. Only 15 per cent. of the Boston nurse graduates marry.

THE Dominion Department of Marine has received a report from Dr. McPherson, who was sent to assist sufferers from the grippe on St. Paul's Island, in the Gulf of St. Lawrence. The Doctor says he found Superintendent Campbell, of the Light Station, and the chief engineer suffering from pneumonia, and nearly every person on the island had been affected with the influenza. Besides this, many children were suffering from diphtheria or whooping cough, and in some instances from both diseases. Dr. McPherson left his assistant on the island. The grippe is also epidemic on Magdalen Island. Hundreds of people are sick, and the canning factories have had to be closed, as there were no one to run them.

THE State Board of Live Stock Commissioners held a secret session in consultation with Mayor Washburne and Dr. Ware, Commissioner of Health, in regard to the inspection of meat and cattle at the stock yards. The fact that once in awhile diseased meat does get on the market was considered by the conference, and it was the expressed opinion of both the city authorities and the State officials that greater vigilance must be used in the inspection. To this end it was the unanimous expression that the State inspectors and the city health department should work in harmony, and that some measures must be used to induce the stock yards officials to lend their co-operation more actively.—*Chicago News.*

WEEKLY Report of Interments in Philadelphia, from May 30 to June 6, 1891:

CAUSES OF DEATH.	Adults.	Minors.	CAUSES OF DEATH.	Adults.	Minors.
Abscess	1	1	Homicide	1	
Aneurism of the aorta	2		Inanition		5
Alcoholism	1		Influenza	6	1
Apoplexy	15		Inflammation bladder	2	
Asthma	2		" brain	4	15
Bright's disease	9	1	" bronchi	1	8
Burns and scalds	1		" kidneys	4	1
Cancer	11		" larynx		5
Casualties	7		" heart		1
Congestion of the brain	2	7	" lungs	14	10
" " lungs	2	1	" pericardium		1
" " kidneys		1	" peritoneum	6	1
Cholera infantum		8	" s. & bowels	2	8
Cirrhosis of the liver	3		Locomotor ataxia	1	
Consumption of the lungs	50	2	Marasmus		21
" " bowels	1		Measles		1
Convulsions		12	Operation, surgical	2	1
" puerperal	1		Obstruction of the bowels	2	
Croup		4	Old age	10	
Debility	3	2	Paralysis	7	
Diabetes	3		Pyæmia	1	1
Diarrhœa	5	2	Stone in bladder	1	
Diphtheria		11	Septicæmia	2	
Disease of the brain		1	Sore throat	1	
" " heart	17	2	Softening of the brain	2	
Dropsy	1	2	Spina vifida		1
Dysentery		1	Suicide	1	
Effusion of the brain		2	Syphilis	1	1
Erysipelas	2		Tabes Mesenterica		1
Embolism, cerebral	1		Teething		2
Fatty degeneration of the heart	2		Tetanus		1
Fever, scarlet	1	7	Tumor	1	
" typhoid	6	3	Ulceration of the stomach	1	
Gangrene	4		Uræmia	5	1
Hemorrhage	1		Whooping cough		6
Hernia	1	1	Total	233	164

Notes and Items.

"WHAT'S in a name?" Considerable, so we have often found.
For instance, grocers sell us salt at but a cent a pound,
While for chloride of sodium, the druggists gayly pounce
Upon our pocket-books and charge us fifty cents an ounce.
—*Chicago Post.*

FAITH AND SIGHT.

MINERVA (looking up from her reading): "Aunt Fidelia, the *Æsculapean* attributes rheumatism to a pathogenic micro-organism, which, under certain favorable conditions, is received and propagated."

AUNT FIDELIA: "I don't believe a word of it. I have had the rheumatism twenty years and I never saw a sign of the creature yet."—*Pharmaceutical Era.*

INDIANA SANATARIUM.
BROOKVILLE, INDIANA, May 2, 1890.

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